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USAF BIOENVIRONMENTAL NOISE DATA HANDBOOK
Volume 121
F-4C Aircraft, Near and Far-Field Noise

APRIL 1979

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AEROSPACE MEDICAL RESEARCH LABORATORY
AEROSPACE MEDICAL DIVISION
AIR FORCE SYSTEMS COMMAND
WRIGHT-PATTERSON AIR FORCE BASE, OHIO 45433

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FOR THE COMMANDER

HENNING E. VON GIERKE
Director
Biodynamics and Bioengineering Division
Aerospace Medical Research Laboratory

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The USAF F-4C is an all-weather, supersonic, fighter-bomber aircraft powered by two J79-GE-15 turbojet engines. This report provides measured and extrapolated data defining the bioacoustic environments produced by this aircraft operating on a concrete runup pad for six engine/power configurations. Near-field data are reported for six locations in a wide variety of physical and psychoacoustic measures: overall and band sound pressure levels, C-weighted and A-weighted sound

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levels, preferred speech interference level, perceived noise level, and limiting times for total daily exposure of personnel with and without standard Air Force ear protectors. Far-field data measured at 19 locations are normalized to standard meteorological conditions and extrapolated from 75-8000 meters to derive sets of equal-value contours for these same seven acoustic measures as functions of angle and distances from the source. Refer to Volume 1 of this handbook, "USAF Bio-environmental Noise Data Handbook, Vol 1: Organization, Content and Applica ion", AMRL-TR-75-50(1) 1975, for discussion of the objective and design of the handbook, the types of data presented, measurement procedures, instrumentation, data processing definitions of quantities, symbols, equations, applications, limitations, etc.

PREFACE

This report was prepared by the Biodynamic Environment Branch, Aerospace Medical Research Laboratory, under Project/Task 723107, Technology To Define And Assess Environmental Quality of Noise From AF Operations and 723108, Crew Safety in Operational Noise Environments.

The author gratefully acknowledges Mr. John Cole for his assistance in preparing this report, Col Justus Rose and Mr. Robert England for their assistance in acquiring the raw data at Eglin AFB, Mr. Robert Lee for data acquired at Nellis AFB, Mr. Keith Kettler, Mr. Henry Mohlman and Mr. Fred Lampley of the University of Dayton for assistance in the mechanics of data processing, and Mrs. Peggy Massie for assistance in typing and preparation of the graphics.

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INTRODUCTION

The USAF F-4C is an all-weather, supersonic, fighter-bomber aircraft powered by two J79-GE-15 turbojet engines. The aircraft was manufactured by the McDonnell Douglas Corporation and the engines by the General Electric Company.

This volume provides measured and extrapolated data defining bioacoustic environments produced by this aircraft during ground runup operations. Such data are essential to evaluate ear protection requirements, limiting personnel exposure times, voice communication capabilities, and annoyance problems associated with ground runups of the F-4C aircraft.

This volume is one of a series published by the Aerospace Medical Research Laboratory (AMRL) under the same report number (AMRL-TR-75-50) as a multi-volume handbook that quantifies the noise environments produced at flight/ground crew locations and in surrounding communities by operations of Air Force aircraft and ground support equipment. The far-field, community-type, noise data in the handbook describe the noise produced during *ground operations of aircraft, ground support equipment, and other ground-based equipment or facilities.*

Volume 1 of this handbook discusses the objectives and design of the handbook, the types of data presented, measurement procedures, instrumentation, data processing, definitions of quantities, symbols, equations, applications, limitations, etc. Volume 2 provides a method and data for adjusting the handbook's far-field noise data, which are for standard meteorological conditions (15°C temperature, 70% rel humidity, 0.760 meters Hg barometric pressure), to derive comparable data for other meteorological conditions. *Refer to Volumes 1 and 2* (references 1 and 2) for such information because it is not repeated in other handbook volumes.

A cumulative index lists those aerospace systems contained in the handbook, and identifies the specific volumes containing each type of environmental noise data available (i.e., inflight/flight crew and passenger noise, near-field/ground crew noise, far-field/community noise). Volume numbers are assigned sequentially as individual volumes are published. This index is periodically updated as individual volumes are published and is available upon request from AMRL/BBE, Wright-Patterson AFB, OH 45433. Organizations on the distribution list for the handbook will automatically receive a copy of each updated index.

Direct any questions concerning the technical data in this report and other handbook volumes to: AMRL/BBE, Wright-Patterson AFB, OH 45433; AUTOVON 78-53675 or 78-53664; Commercial (513) 255-3675 or (513) 255-3664.

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1. Cole, John N., *USAF Bioenvironmental Noise Data Handbook Volume 1: Organization, Content and Application,* AMRL-TR-75-50 (1), Aerospace Medical Research Laboratory, Wright-Patterson Air Force Base, Ohio, 1975.

2. Cole, John N., *USAF Bioenvironmental Noise Data Handbook, Volume 2: Procedure to Evaluate Effects of Non-standard Meteorological Conditions on Far-Field Noise,* AMRL-TR-75-50 (2), AMRL, WPAFB, OH, 1975.

NEAR-FIELD NOISE

MEASUREMENTS

AMRL acquired near-field noise data on the F-4C aircraft during ground runup operations of its turbojet engines. For these tests the aircraft was located on a concrete pad at Eglin AFB and Nellis AFB with no significant reflecting surfaces in the vicinity except the ground plane. Table 1 gives the surface meteorological conditions and the ten engine/power conditions. The ground-crew chief selected power conditions and near-field locations generally used during routine maintenance or engine runup for preflight checks.

At each near-field location a test engineer randomly moved a hand-held microphone in and around each location, probing all areas where a crew member's head would normally be located. He recorded all the noise samples on magnetic tape. During analysis of each sample, he determined the octave band root-mean-square sound pressure using a 4- or 8-sound integration time to derive a power-averaged level for each location. Figure 1 shows the four near-field locations where ground crews are usually located for maintenance and/or preflight checkout operations. Estimates of noise levels at other locations are difficult in the near-field since the noise source is spatially distributed, i.e., not a point source. The noise levels at near-field locations can vary widely depending upon relative distances from each noise source (intake noise, exhaust noise, panel resonances, internal engine noise through the engine wall, etc).

Table 1 lists the numeric/alphabetic designators used on the data pages in this report to identify the measurement locations and test conditions. For example, the designator 1/A means ground crew location 1 and test condition A.

RESULTS

The measured data presented in Table 2 define the sound pressure levels (SPL) produced by the F-4C aircraft at the six ground crew locations. This table includes the overall, 1/3 octave band, and octave band levels. From these data one can calculate the variety of measures given in Table 3, which are widely used to assess the effects of noise on personnel and their performance.

All near-field data are for the meteorological conditions at the time of test but are valid for all typical airbase meteorology because of the short sound propagation distances involved.

TABLE 1

MEASUREMENT LOCATIONS AND TEST CONDITIONS FOR NEAR-FIELD NOISE MEASUREMENTS

F-4C Aircraft, Ground Runup
Eglin AFB FL 22 Jul 1971 Tail #40930
Eglin AFB FL 4 Aug 1971 Tail #40817
Nellis AFB NV 9 Sep 1977 Tail #0647

Ground Crew Location

1	MA-1A Operator
2	Bay Check
3	A/M 32A-60 Operator
4	Chock Pull
5	Leak Check
·	Observer

Aircraft Engine and Ground Support Equipment Operation

A	Engines Off, MD-3M, MA-1A (Unloaded)
B	Engine #1 Idle, MD-3M, MA-1A (Loaded)
C	Ground Support Equipment Off Engine #1 85% RPM
D	Engine #2 Idle A/M 32A-60 (Air Supply Off)
E	Engines #1 and #2 Idle A/M 32A-60 (Air Supply Off)
F	Engines Off A/M 32A-60 (Air Supply Off)
G	Ground Support Equipment Off Engines #1 and #2 Idle
H	Ground Support Equipment Off Engine #1 Idle
I	Ground Support Equipment Off Engine #1 Military Power
J	Ground Support Equipment Off Engine #1 Afterburner Power

Meteorology

Eglin AFB, 4 Aug 1971, Location 1 and 2

Temperature	31.1 C
Bar Pressure	0.760 M Hg
Rel Humidity	55 %
Wind — Speed	1 M/Sec (2 Kt)
— Direction	360 Deg

Eglin AFB, 22 July 71, Location 3 and 4

Temperature	24 C
Bar Pressure	0.760 M Hg
Rel Humidity	88 %
Wind — Speed	1 M/Sec (2 kt)
— Direction	320 Deg

Nellis AFB, Location 5 and 6

Temperature	37.8 C
Bar Pressure	0.709 M Hg
Rel Humidity	18 %
Wind	Calm

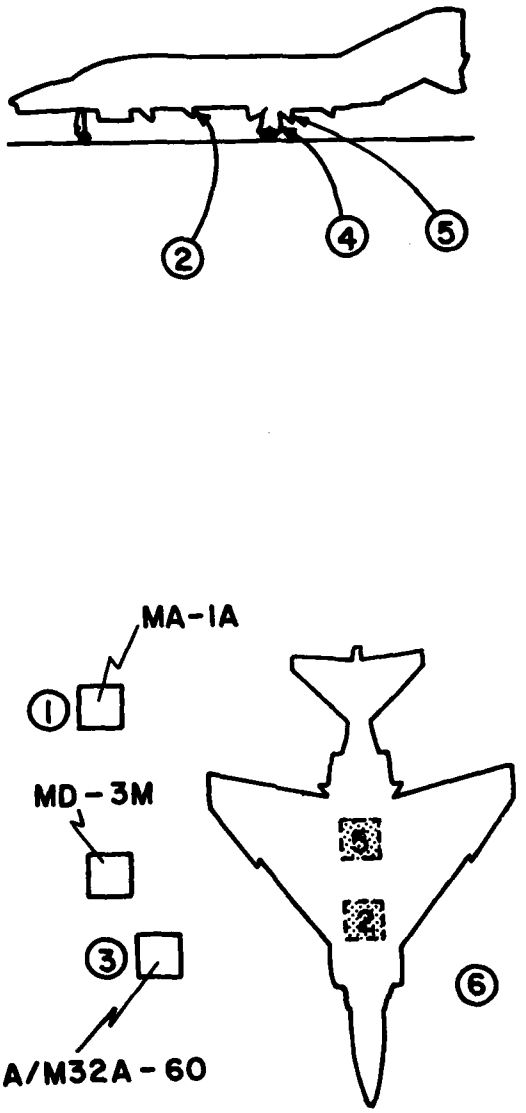


Figure 1. Near-Field Measurement Locations at Trim Pad Eglin AFB FL

FAR-FIELD NOISE

MEASUREMENTS

AMRL acquired far-field data during two 1-hour test periods at Eglin AFB. Figure 2 shows the ground runup pads, ground cover, aircraft orientation and the microphone measurement sites on each semicircle. The centers of the 50 and 75 meter radius semicircles used in surveying the J79-GE-15 engines were on the ground directly below the intersection of the aircraft's centerline and the plane passing through the exhause-nozzles' exits.

The ground runup pad (Hot Cargo Pad) used for all engine/power configurations except afterburner power did not have a blast deflector, therefore, the jet exhaust was in a "free-flow" condition. However the trim pad used for the afterburner power measurements did have a blast deflector installed as part of the facility. In this case the aircraft was placed on a long tie-down cable so that the distance between the exhaust nozzles and the deflector was 52 meters. At this distance there was minimal interaction between the noise source and the blast deflector so that noise measurements acquired at 50 meters were essentially in a "free-flow" condition and should be used as such.

Table 4 provides cockpit readouts of the engine's RPM for each setting used in the far-field tests. Also listed in this table are the surface meteorological conditions during data acquisition.

All microphone measurement sites are in the acoustic far-field of the source where the sound wavefronts spherically diverge and the noise source may be regarded as a point source.

Test personnel acquired far-field noise data at Eglin AFB by using a handheld microphone (1.7 meters/5-1/2 feet above the ground plane and pointed at the noise source, 0° incidence) and sequentially recording 5-10 seconds of data at each far-field location on a portable microphone/tape recorder system. The samples were then time-integrated to derive a root-mean-square sound pressure level.

RESULTS

Table 5 lists the overall and 1/3 octave band SPL measured at the far-field locations under meteorological conditions at the time of the test. Data in all other figures and tables are based on these levels. These data were normalized to 100 meters distance and standard meteorological conditions (15°C temperature, 70% relative humidity, 0.760 meter Hg barometric pressure) and used to derive the graphic data in Figure 3 which provides a compact summary of the far-field noise characteristics of the F-4C aircraft in a standard format.

Figure 4 and Table 6 present two basic acoustic measures, the acoustic power levels and the directivity index, respectively. The acoustic power level describes the power radiated by the source as a function of frequency. The directivity index is a standard acoustical engineering measure that describes the geometric way in which the source radiates this power as a function of both frequency and angle from source. These basic source measures are primarily of interest for acoustical engineers and noise generation/control specialists.

Estimates of noise levels for intermediate power conditions (e.g., 88% engine RPM), and/or different number of engines operating) can be determined as explained in Volume 1 of this handbook.

Figures 5 through 11 are sets of equal noise contours describing seven different measures of noise as a function of angle and distance from the source for standard day meteorology. They are, respectively, overall sound pressure level, C-weighted sound level, A-weighted sound level. perceived noise level, speech interference level, permissible exposure times for personnel and octave band sound pressure levels.

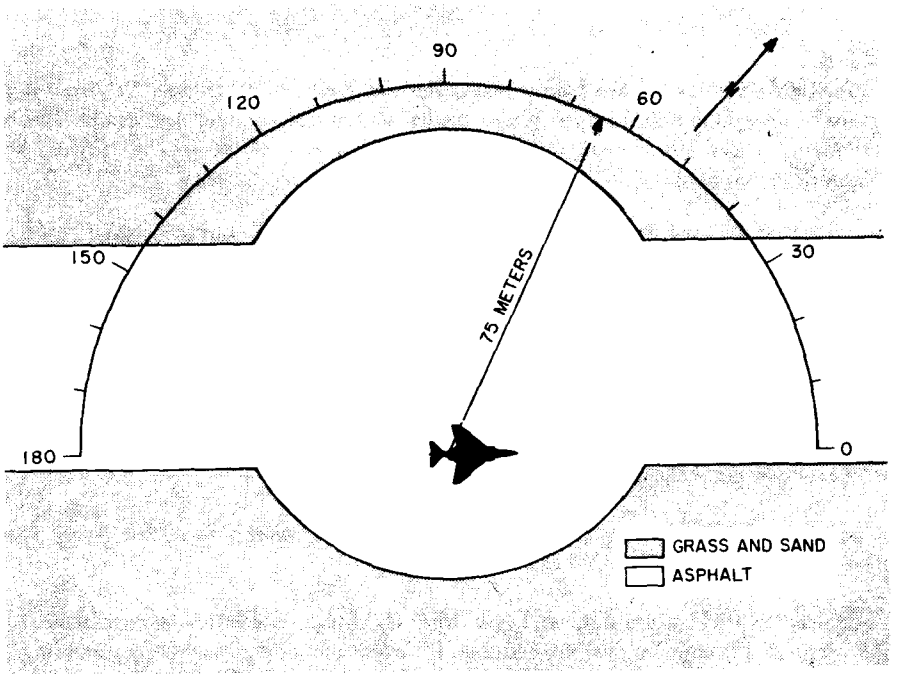


Figure 2(a). Far-Field Measurement Locations at the Hot Cargo Pad, Eglin AFB FL

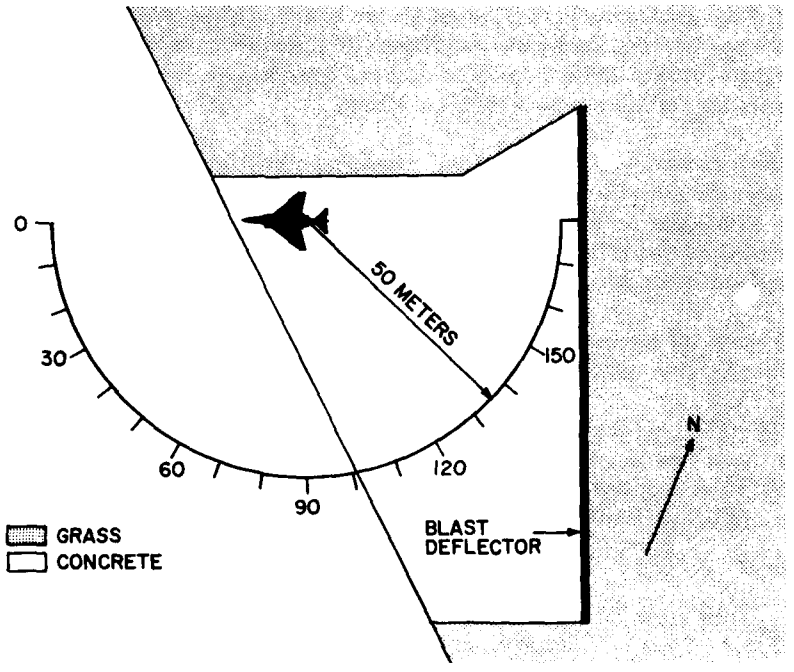


Figure 2(b). Far-Field Measurement Locations at the Trim Pad Eglin AFB FL

Data excessively influenced by spurious background/electronic noise were eliminated from all figures and tables. No data are presented at the 180 degree location for the military and two-engine 85% RPM power settings nor at the 160, 170, and 180 degree locations for the afterburner power setting because of turbulent air flow behind the aircraft. Typically, the A-weighted levels for these angles are 10 to 20 dBA below the level measured at the preceding microphone location.

Test personnel performed noise surveys during quiet periods when the background noise was minimal, e.g., early in the morning when no other aircraft or engine test stands were operating. Data eliminated because they were near the background/electronic noise were generally not significant because the levels were so low (e.g., Table 5 at idle power).

Volume 2 of the handbook describes the influence of meteorology on far-field noise environments, and provides, if required, the factors necessary to adjust the handbook's standard meteorological day data.

TABLE: 2 MEASURED SOUND PRESSURE LEVEL (DB) 1/3 OCTAVE BAND

IDENTIFICATION:
OMEGA 3.2
TEST 71-019-200
RUN 01
24 APR 79
PAGE F1

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
GROUND CREW
NEAR FIELD NOISE LEVELS

OPERATION:

FREQ (HZ)	LOCATION/CONDITION 1/A	1/B	2/H	3/D	3/E	3/F	4/G	5/H	5/C	5/I	5/J	6/H	6/C	6/I	6/J
25	83	87	98	88	94	79	102	99	104	101	108	79	80	86	99
31.5	84	91	111	98	102	84	110	106	104	102	110	89	81	86	100
40	86	94	110	99	106	85	116	110	107	106	117	94	85	90	102
50	94	96	99	92	110	89	124	98	105	107	116	84	87	92	103
63	92	94	95	92	93	91	102	90	104	106	115	82	91	95	105
80	89	93	97	92	92	92	97	94	103	105	113	82	92	98	107
100	106	107	100	92	93	90	98	90	108	114	117	82	95	101	110
125	103	105	98	92	93	97	98	91	110	118	120	82	96	103	111
160	98	102	98	96	97	99	93	90	109	117	123	80	97	104	110
200	94	97	92	94	95	97	88	91	110	119	123	79	99	109	114
250	97	95	95	100	99	97	88	86	108	116	122	79	96	106	113
315	96	98	93	95	93	95	88	89	115	120	123	82	104	108	112
400	94	100	92	89	93	94	91	94	110	119	124	84	97	106	114
500	92	97	91	86	88	91	90	89	111	120	126	86	98	109	115
630	94	98	91	82	88	90	90	88	110	120	126	85	97	107	113
800	90	94	91	83	89	89	91	90	111	121	127	88	98	109	114
1000	88	90	89	84	88	85	91	90	109	121	127	89	101	110	115
1250	92	91	90	80	82	80	90	91	109	121	126	89	100	111	115
1600	91	92	97	80	89	80	95	96	109	120	126	100	100	109	113
2000	93	94	96	84	88	87	95	97	108	119	126	98	107	107	113
2500	94	95	95	81	85	81	93	93	109	117	124	95	110	106	111
3150	94	95	95	82	84	83	91	92	108	116	123	93	105	105	110
4000	97	96	94	85	90	92	94	93	108	116	122	94	103	105	110
5000	98	95	94	82	83	84	92	90	103	112	120	90	104	103	107
6300	102	100	95	83	83	87	91	88	100	111	118	89	102	103	106
8000	121	115	99	87	86	91	91	87	100	109	115	87	100	102	104
10000	122	117	100	88	87	93	90	86	97	106	113	85	99	101	103
OVERALL	125	120	115	106	112	106	124	113	123	131	137	105	115	120	125

LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

TABLE: 2 — MEASURED SOUND PRESSURE LEVEL (DB) OCTAVE BAND

IDENTIFICATION:
OMEGA 3.2
TEST 71-019-200
RUN 01
24 APR 79
PAGE J1

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
GROUND CREW
NEAR FIELD NOISE LEVELS

OPERATION:

FREQ (HZ)	LOCATION/CONDITION 1/A	1/B	2/H	3/D	3/E	3/F	4/G	5/H	5/C	5/I	5/J	6/H	6/C	6/I	6/J
31.5	89	96	113	102	107	88	117	112	110	108	118	95	87	93	105
63	97	99	102	97	110	95	124	100	109	111	120	87	95	100	110
125	108	110	103	98	99	101	102	95	114	121	125	86	101	108	115
250	100	102	98	102	101	101	93	94	117	123	127	85	106	112	118
500	98	103	96	91	95	97	95	96	115	124	130	90	102	112	119
1000	95	97	95	87	92	91	95	95	114	126	131	93	104	115	119
2000	98	98	101	86	92	88	99	101	113	123	130	103	112	112	117
4000	101	100	99	88	91	93	97	96	111	119	127	97	109	109	114
8000	124	119	103	91	90	96	95	92	104	114	121	92	105	107	109
OVERALL	125	120	115	106	112	106	124	113	123	131	137	105	115	120	125

TABLE: MEASURES OF HUMAN NOISE EXPOSURE

3

IDENTIFICATION:

OMEGA 3.2
TEST 71-019-200
RUN 01

24 APR 79

PAGE H1

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
GROUND CREW
NEAR FIELD NOISE LEVELS

OPERATION:

	LOCATION/CONDITION														
	1/A	1/B	2/H	3/D	3/E	3/F	4/G	5/H	5/C	5/I	5/J	6/H	6/C	6/I	6/J
HAZARD/PROTECTION															
C-WEIGHTED OVERALL SOUND LEVEL (OASLC IN DBC) AT EAR															
A-WEIGHTED OVERALL SOUND LEVEL (OASLA IN DBA) AT EAR															
MAXIMUM PERMISSIBLE TIME (T IN MINUTES) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)															
NO PROTECTION															
OASLC	121	117	113	106	111	106	123	111	122	131	137	105	115	120	125
OASLA	123	118	106	98	100	101	104	104	120	130	136	106	116	119	124
T	P	P	11	42	30	25	15	15	P	P	P	11	P	P	P
MINIMUM QPL EAR MUFFS															
OASLA*	100	96	86	82	84	83	94	82	98	106	111	77	89	94	100
T	30	60	339	679	480	571	85	679	42	11	4.5	960	202	85	30
AMERICAN OPTICAL 1700 EAR MUFFS															
OASLA*	98	93	82	78	82	79	94	79	93	101	106	71	84	89	95
T	42	101	679	960	679	960	85	960	101	25	11	960	480	202	71
V-51R EAR PLUGS															
OASLA*	94	89	79	75	77	77	85	77	95	105	110	76	86	93	98
T	85	202	960	960	960	960	304<	960	71	13	5	960	339	101	42
AMERICAN OPTICAL 1700 EAR MUFFS PLUS V-51R EAR PLUGS															
OASLA*	84	80	68	61	66	62	77	66	80	91	96	62	73	79	84
T	480	960	960	960	960	960	304<	960	960	143	60	960	960	960	480
H-133 GROUND COMMUNICATION UNIT															
OASLA*	94	89	81	72	77	73	89	79	92	102	108	78	89	91	96
T	85	202	807	960	960	960	202	960	120	21	8	960	202	143	60
COMMUNICATION															
PREFERRED SPEECH INTERFERENCE LEVEL (PSIL IN DB)															
PSIL	97	99	97	88	93	92	96	97	114	124	130	95	106	113	118
ANNOYANCE															
PERCEIVED NOISE LEVEL, TONE CORRECTED (PNLT IN PNDB)															
TONE CORRECTION (C IN DB)															
PNLT	135	131	122	114	117	119	122	119	134	142	149	120	131	132	136
C	2	1	2	1	2	2	0	1	1	0	0	2	1	1	0

* BASED ON CALCULATED SPL SPECTRUM UNDER PROTECTIVE DEVICE.
P ADDITIONAL EAR PROTECTION REQUIRED.
< TIME LIMIT SET TO AVOID WHOLE BODY EFFECTS (WHOLE BODY LIMITS EXTRAPOLATED AT -4 DB PER DOUBLE TIME).

TABLE 4

TEST CONDITIONS FOR FAR-FIELD NOISE MEASUREMENTS

F-4C Aircraft, Ground Runups, Eglin AFB FL
22 July 1971, Tail #40930
4 August 1971, Tail #40817

Aircraft Engine Operation

Idle	Single Engine 65% RPM, Core Speed
85% Runup	Single Engine 85% RPM, NC
Military	Single Engine 100% RPM, NC
Idle	Two Engines 65% RPM, NC
85% Runup	Two Engines 85% RPM, NC
Afterburner	Single Engine 100% RPM, NC

Meteorology

22 July 1971 (Idle, 85% and Military)

Temperature	25.6 C
Bar Pressure	0.761 M Hg
Rel Humidity	65 %
Wind — Speed	2 M/Sec (4 kts)
— Direction	020 Deg

4 August 1971 (Afterburner)

Temperature	31.1 C
Bar Pressure	0.761 M Hg
Rel Humidity	55 %
Wind — Speed	1 M/Sec (2 kts)
— Direction	360 Deg

TABLE 5 MEASURED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 75 METERS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 01
02 AUG 76
PAGE 2

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 26 C
BAR PRESS = .761 M HG
REL HUMID = 65 %

FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
25	67<	66<	68<	74<	68<	69<	71<	72<	74<	74<	71<	73<	72<	72<	74<	71<	74<	73<	72<
31.5	76<	78	79	80	79	80	83	83	83	83	81	80	79	82	80	80	82	79	79
40	81	83	82	84	83	85	84	86	87	85	84	84	85	85	85	85	83	83	82
50	72<	72<	71<	76	75	75	75	75	76	76	76	76	77	78	77	75	75	74	73<
63	69<	67<	70<	75<	72<	73<	69<	72<	72<	74<	73<	75<	77	76<	76<	76<	78	73<	70<
80	65<	66<	68<	74	69<	69<	69<	70<	74	75	73	72<	74	77	76	76	76	73<	66<
100	65<	68<	70<	74<	68<	70<	71<	74<	76	76	74<	74<	76	76	78	77	76	71<	
125	67<	70<	74	75	73	73<	74	76	78	78	80	81	81	81	79	79	77	71<	65<
160	65<	69<	72	74	74	71<	75	77	78	79	78	78	81	82	81	80	76	68<	64<
200	64<	67<	68<	69<	66<	64<	69<	69<	70<	72<	73<	73	74	76	77	74	70<	63<	
250	64<	66<	67<	69<	63<	64<	63<	64<	65<	67<	68<	72	74	74	75	71	66<	63<	
315	66	70	69	69	66	66	65	68	68	69	69	69	74	75	73	72	65	64<	59<
400	70	73	73	70	70	68	68	74	73	73	74	75	75	75	74	72	69	65	59<
500	75	78	75	71	71	67	72	73	73	72	69	70	74	75	72	69	68	63	53<
630	71	72	70	72	71	69	69	70	69	68	67	68	71	71	67	63	61	61	49<
800	74	73	71	71	71	67	70	71	71	70	67	68	71	71	67	65	63	59	46<
1000	74	73	74	72	72	68	68	67	68	66	65	67	67	67	63	61	61	62	47<
1250	76	75	75	74	72	70	67	67	68	65	66	68	69	66	63	62	62	61	46<
1600	87	86	83	84	79	78	77	77	74	68	68	67	69	67	67	65	63	63	48<
2000	84	86	83	82	77	76	75	75	72	68	67	68	68	68	67	64	64	64	49
2500	80	86	82	81	77	75	72	72	70	67	66	66	66	67	66	63	63	63	47
3150	75	76	75	76	71	69	67	67	66	63	63	63	64	63	62	59	57	57	42<
4000	77	79	77	77	72	72	69	68	68	64	65	65	65	65	64	61	58	57	42<
5000	74	76	74	75	70	70	67	66	65	62	65	66	66	65	63	61	56	55	40<
6300	71	73	72	72	67	67	63	63	64	61	67	67	67	66	65	62	58	56	40<
8000	70	72	71	70	66	66	62	61	62	59	65	64	65	64	64	61	57	54	38<
10000	65	68	67	66	62	62	58	57	57	55	60	59	60	59	59	57	52	49	
OVERALL	91	92	91	91	88	89	89	90	90	90	89	89	90	91	90	89	88	86	85

< LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

TABLE: 5

MEASURED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 75 METERS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 02
02 AUG 76
PAGE 2

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 26 C
BAR PRESS = .761 M HG
REL HUMID = 65 %

FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
25	68<	68<	66<	68<	71<	79	75<	74<	75<	76<	79	80	81	85	86	89	91	90	88
31.5	70<	70<	71<	72<	73<	79	76<	76<	77	79	79	80	82	86	88	91	93	92	88
40	72<	71<	73<	74<	76	80	78	80	81	81	82	84	84	89	93	95	95	93	87
50	74	74	75	76	78	80	81	82	82	83	85	86	87	92	96	97	97	94	81
63	76<	76<	77	79	82	82	83	85	86	85	87	88	92	95	99	102	100	96	78
80	78	78	79	81	83	83	85	85	85	86	88	90	93	98	101	103	102	96	72<
100	81	80	83	86	85	85	86	88	88	91	93	93	94	101	106	106	104	98	72<
125	81	82	84	87	87	88	88	90	91	92	93	96	97	102	108	108	105	98	75
160	83	84	87	87	89	88	91	91	93	93	95	97	99	103	109	110	107	98	76
200	81	84	87	86	86	87	89	90	89	91	94	95	97	102	105	107	105	95	72<
250	80	82	84	84	85	85	86	88	88	90	92	93	96	99	102	104	102	93	69<
315	81	85	87	87	88	88	91	92	94	93	95	95	98	102	102	103	105	93	70
400	83	86	90	91	93	92	95	96	97	97	98	99	100	103	103	102	104	93	69
500	81	84	88	89	93	91	94	95	95	97	98	99	100	102	100	98	97	84	66
630	84	89	88	90	90	91	95	95	97	94	96	99	100	102	100	99	98	84	65
800	89	99	91	96	97	99	103	101	103	99	99	109	110	110	105	107	103	90	71
1000	79	82	83	85	86	86	89	91	92	92	93	94	95	98	98	96	93	80	63
1250	80	82	83	86	87	86	89	92	92	92	92	94	94	96	96	93	89	77	61
1600	83	84	84	87	87	85	89	91	91	93	92	93	96	96	94	90	89	76	63
2000	97	96	92	95	93	88	90	90	90	91	90	92	94	95	93	90	86	76	60
2500	97	97	94	95	95	92	93	91	89	90	89	90	93	94	91	88	83	76	59
3150	86	86	84	86	86	82	85	85	86	87	86	87	90	91	89	84	79	71	56
4000	90	88	85	87	88	82	85	85	86	87	86	86	89	90	89	84	78	72	56
5000	87	87	84	86	88	82	85	83	84	84	83	83	85	88	85	80	75	69	52
6300	84	83	79	83	84	79	82	81	82	81	81	81	83	86	84	79	74	68	49
8000	81	82	79	81	83	77	81	79	80	78	80	79	81	83	81	77	73	68	46<
10000	77	77	75	77	77	74	76	75	76	74	77	75	77	79	76	74	69	64	42<
OVERALL	102	103	100	103	103	103	106	106	107	106	107	111	113	114	115	116	114	106	93

< LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

TABLE 5: MEASURED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 75 METERS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 03
02 AUG 76
PAGE 2

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 26 C
BAR PRESS = .761 M HG
REL HUMID = 65 %

FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
25	76<	77	77<	78	78	81	80	81	82	84	85	86	88	93	96	100	100	97	
31.5	77	77	78	80	80	80	81	82	83	85	87	88	91	95	98	102	102	98	
40	79	79	81	81	82	84	84	86	88	87	89	89	93	99	103	106	105	100	
50	81	81	81	82	84	83	85	87	88	88	89	91	94	100	106	107	105	100	
63	83	82	83	85	88	85	87	89	92	91	92	93	98	104	108	110	107	99	
80	84	84	87	87	87	88	89	89	91	93	95	97	102	108	111	112	108	99	
100	87	88	89	91	91	92	92	95	95	97	98	100	106	113	117	115	111	100	
125	89	89	92	92	92	95	94	97	98	99	101	102	107	116	119	118	112	100	
160	91	92	95	95	95	96	97	98	99	100	103	104	109	118	121	119	114	100	
200	91	93	94	94	93	96	96	96	98	99	103	104	107	116	119	118	113	96	
250	89	93	92	93	94	95	93	96	96	98	100	103	107	113	117	117	111	93	
315	91	92	96	95	95	96	96	97	97	100	103	106	110	117	118	118	114	93	
400	93	96	98	96	97	99	99	101	100	102	105	109	111	117	121	119	115	91	
500	92	94	96	97	100	99	101	102	100	103	106	109	110	115	117	116	113	87	
630	91	94	96	96	98	98	99	99	99	100	103	107	109	113	116	113	111	85	
800	94	95	97	99	101	101	101	102	100	103	106	108	109	113	115	113	109	83	
1000	90	92	94	96	98	98	99	99	99	100	102	105	106	109	113	110	108	82	
1250	89	91	93	96	97	96	98	101	99	101	104	107	106	109	111	110	107	81	
1600	87	90	93	95	94	95	98	100	99	101	104	108	107	108	111	109	105	80	
2000	84	87	90	92	93	94	95	97	98	98	102	107	104	107	109	107	103	78	
2500	84	86	90	92	94	94	95	97	98	97	99	107	104	106	108	106	102	76	
3150	82	84	87	88	90	90	92	94	95	94	96	104	101	103	105	103	98	73	
4000	82	83	86	88	88	88	91	93	95	94	95	104	101	103	105	102	97	72	
5000	80	80	84	84	86	86	88	90	92	90	92	101	98	101	102	99	93	68	
6300	78	79	82	83	84	83	86	88	91	88	90	99	96	98	101	97	92	66	
8000	76	77	80	81	83	82	84	85	90	86	89	98	95	97	100	95	90	64	
10000	72	73	76	77	78	77	80	81	87	82	85	94	92	94	98	91	87	60	
OVERALL	102	104	106	107	108	109	110	111	111	112	115	118	120	126	129	128	123	109	

< LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

TABLE 5: MEASURED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 75 METERS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 04
02 AUG 76
PAGE 2

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 26 C
BAR PRESS = .761 M HG
REL HUMID = 65 %

FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
25	69<	72<	69<	71<	70<	72<	73<	72<	72<	73<	75<	73<	74<	75<	75<	75<	77	75<	73<
31.5	78	79	82	81	84	85	83	83	83	84	85	83	83	82	83	83	83	82	79
40	83	85	86	87	88	89	87	87	87	88	88	87	85	86	86	85	85	84	80
50	89	79	77	79	78	78	77	76	77	77	77	77	80	79	78	76	77	74	69<
63	76<	71<	72<	73<	75<	72<	74<	72<	74<	75<	77<	77<	78	78	77	78	78	75<	
80	75	70<	71<	73<	71<	70<	72<	71<	74	75	75	75	76	77	78	77	76	70<	
100	79	71<	72<	73<	70<	71<	72<	75<	76	76	77	76	77	78	79	77	76	70<	
125	79	74	75	75	76	75	75	79	77	78	81	82	81	83	83	80	76	71<	
160	80	73	75	75	74	73	76	78	78	80	79	81	83	84	84	82	74	68<	61<
200	79	69<	71<	69<	67<	66<	68<	70<	72<	72<	75	74	76	78	78	77	68<		
250	77	69<	69<	67<	65<	66<	65<	66<	68<	68<	71	74	75	73	76	73	67<	63<	
315	74	73	70	69	68	69	66	68	68	69	71	73	75	77	73	75	68	64<	
400	74	75	74	73	71	71	69	73	72	72	75	75	76	77	77	74	71	63	53<
500	80	79	77	72	71	69	73	73	71	70	71	72	75	76	74	69	67	62	48<
630	77	75	71	71	71	71	70	70	67	67	68	71	71	72	68	66	65	59	
800	78	75	74	72	72	70	71	70	69	69	69	70	71	71	68	66	64	57	43<
1000	77	74	73	71	71	71	70	67	67	65	67	68	67	67	64	63	63	58	43<
1250	76	74	73	72	70	70	67	66	65	64	67	68	71	66	65	63	63	59	42<
1600	85	83	83	83	79	79	75	72	70	67	68	68	70	68	67	65	64	60	45<
2000	83	82	82	80	77	77	74	72	69	68	68	68	70	69	67	64	65	63	46<
2500	81	82	80	77	77	77	70	68	65	63	66	66	68	66	65	62	63	63	44<
3150	78	77	74	72	70	70	65	64	62	62	62	63	67	64	63	59	58	54	41<
4000	80	80	76	75	72	72	68	64	63	63	63	64	69	65	64	61	59	55	41<
5000	76	75	74	73	69	70	66	63	61	62	63	64	70	66	64	60	57	52	39<
6300	72	73	70	69	66	67	63	60	61	65	65	64	73	67	66	61	58	52	40<
8000	72	72	70	69	65	65	61	59	60	62	63	62	70	66	65	61	58	50	38<
10000	68	68	66	64	62	61	58	56	56	59	59	59	65	61	61	56	54	46	
OVERALL	94	92	92	91	91	92	90	90	90	91	92	91	91	92	92	90	89	87	83

< LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

TABLE: 5

MEASURED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 75 METERS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 05
02 AUG 76
PAGE 2

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 26 C
BAR PRESS = .761 M HG
REL HUMID = 65 %

FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
25	70<	72<	71<	74<	73<	76<	78	78	81	80	82	83	82	86	90	91	92	90	
31.5	73<	73<	75<	75<	78	79	79	80	81	81	83	84	86	87	90	94	95	90	
40	75<	75<	77	78	80	80	82	83	84	84	85	88	88	90	94	96	95	89	
50	76	77	78	78	82	82	82	85	85	86	88	89	91	94	97	99	95	86	
63	79	78	80	81	86	84	86	86	87	89	90	92	95	96	101	102	98	86	
80	80	80	82	83	84	86	88	88	88	90	90	92	95	100	103	103	100	84	
100	83	83	86	88	88	88	90	91	92	94	94	95	98	103	107	107	103	84	
125	84	84	87	89	89	90	91	93	93	95	97	98	100	105	108	110	105	84	
160	87	86	89	89	91	90	93	94	95	96	98	99	102	108	111	112	106	84	
200	85	85	89	88	89	89	90	91	93	94	96	97	100	103	107	109	103	81	
250	83	84	86	86	88	90	89	90	92	92	94	96	98	101	102	106	102	77	
315	86	86	89	90	91	93	92	94	96	95	99	100	100	102	103	104	102	74	
400	88	88	91	91	94	95	95	96	98	98	100	101	102	104	104	103	101	73	
500	86	87	89	89	93	93	96	94	96	96	98	99	102	102	101	100	97	70	
630	90	90	91	91	94	95	95	98	98	97	100	104	104	103	100	101	97	71	
800	93	95	95	94	100	103	103	103	102	104	104	113	114	110	108	110	106	78	
1000	84	82	85	86	88	89	89	92	94	94	96	98	97	99	97	98	93	67	
1250	83	83	85	86	88	90	89	90	92	93	95	97	97	97	95	95	90	64	
1600	85	86	86	87	90	92	90	89	92	93	95	96	98	95	93	94	91	64	
2000	95	97	93	93	92	91	89	89	91	92	93	94	95	95	92	92	87	62	
2500	96	98	96	95	95	93	91	89	90	91	93	92	95	93	91	90	85	61	
3150	87	89	87	86	86	86	83	85	87	88	90	90	92	90	88	87	81	58	
4000	90	91	88	87	88	87	83	85	87	89	90	90	91	89	88	86	79	57	
5000	89	90	87	85	87	86	83	83	85	86	87	87	88	86	85	83	76	54	
6300	85	86	84	82	83	83	79	81	84	84	86	85	86	83	84	81	74	52	
8000	83	85	82	81	82	81	78	79	82	82	84	83	84	82	82	79	73	50	
10000	79	79	78	76	78	77	74	76	78	78	80	80	80	78	78	75	69	47	
OVERALL	102	103	103	103	105	106	106	107	108	108	110	115	116	116	117	118	114	97	

< LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

TABLE: 5

MEASURED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 50 METERS

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
DEFLECTED FLOW

METEOROLOGY:
TEMP = 31 C
BAR PRESS = .761 M HG
REL HUMID = 55 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-059
RUN 03
09 AUG 76
PAGE 2

FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
25	89	90	89	91	91	93	93	95	94	96	100	98	101	106	109	108			
31.5	94	92	92	93	93	94	95	97	97	97	104	102	108	111	113	111			
40	94	95	95	95	97	98	99	99	99	100	108	107	113	114	116	112			
50	93	94	95	97	98	97	99	100	100	103	108	108	113	117	117	112			
63	97	96	97	99	99	100	100	101	102	103	108	110	116	121	120	112			
80	99	98	99	100	100	100	102	102	103	105	112	114	121	123	120	111			
100	101	101	103	104	104	104	105	106	106	109	116	119	124	127	124	112			
125	103	102	104	105	106	106	107	108	109	111	119	122	127	129	127	112			
160	104	105	107	107	108	108	109	110	111	112	121	124	131	130	129	111			
200	102	104	105	105	105	107	107	108	110	111	120	123	127	127	127	108			
250	103	104	107	106	108	107	107	110	112	114	122	124	128	128	128	105			
315	106	105	107	109	110	110	112	112	114	116	126	127	129	131	132	106			
400	104	103	106	108	109	110	111	112	113	114	124	126	127	129	130	108			
500	102	104	106	107	108	108	109	112	115	116	124	125	125	126	125	104			
630	105	106	107	109	111	111	113	115	115	117	126	126	128	129	127	106			
800	100	102	104	106	108	108	110	111	114	115	123	123	124	124	122	104			
1000	100	102	103	105	107	107	109	111	112	114	123	122	123	123	121	102			
1250	98	101	101	103	106	106	109	110	112	113	121	121	121	122	120	102			
1600	98	101	102	103	106	106	109	111	112	114	122	121	122	123	120	102			
2000	97	100	101	102	105	105	108	110	110	113	121	120	120	122	118	101			
2500	95	98	99	100	103	102	105	109	108	110	119	117	116	120	115	98			
3150	94	96	98	99	101	101	105	108	108	110	117	116	117	118	115	97			
4000	93	94	95	97	100	100	102	106	107	108	116	115	115	116	112	97			
5000	90	91	93	94	98	98	100	105	104	106	113	112	113	114	111	94			
6300	89	91	92	94	97	97	100	104	104	106	113	112	113	115	110	93			
8000	86	88	89	91	94	94	97	102	101	103	111	111	111	112	109	91			
10000	84	87	89	90	93	94	96	102	101	103	111	111	112	113	109	90			
OVERALL	114	115	117	118	119	120	121	123	124	126	134	135	138	139	138	122			

LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

FIGURE: 3 NORMALIZED FARFIELD NOISE LEVELS

DISTANCE = 100 METERS

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 01
02 AUG 76
PAGE 6

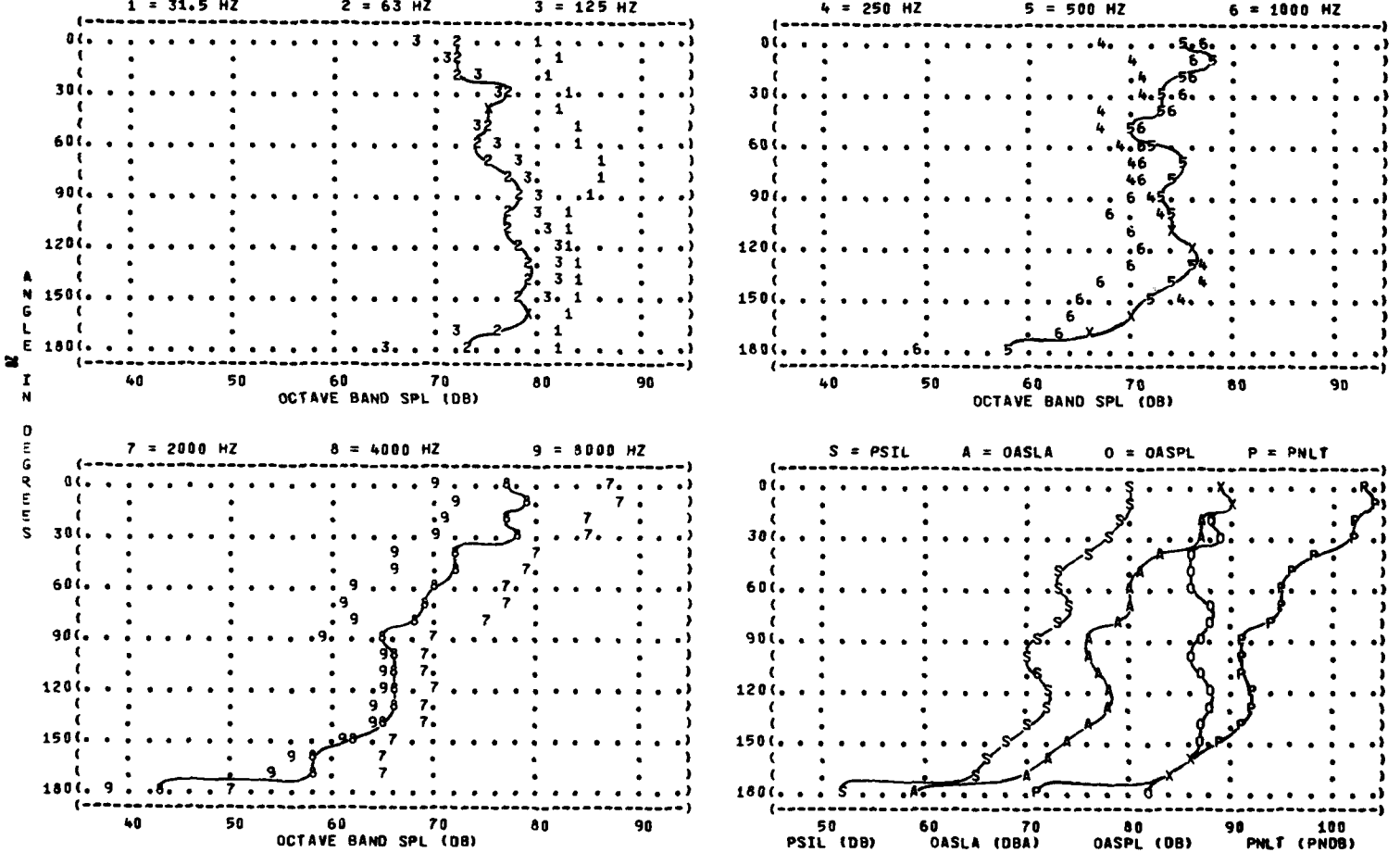


FIGURE: 3 NORMALIZED FARFIELD NOISE LEVELS

DISTANCE = 100 METERS

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 02
02 AUG 76
PAGE 6

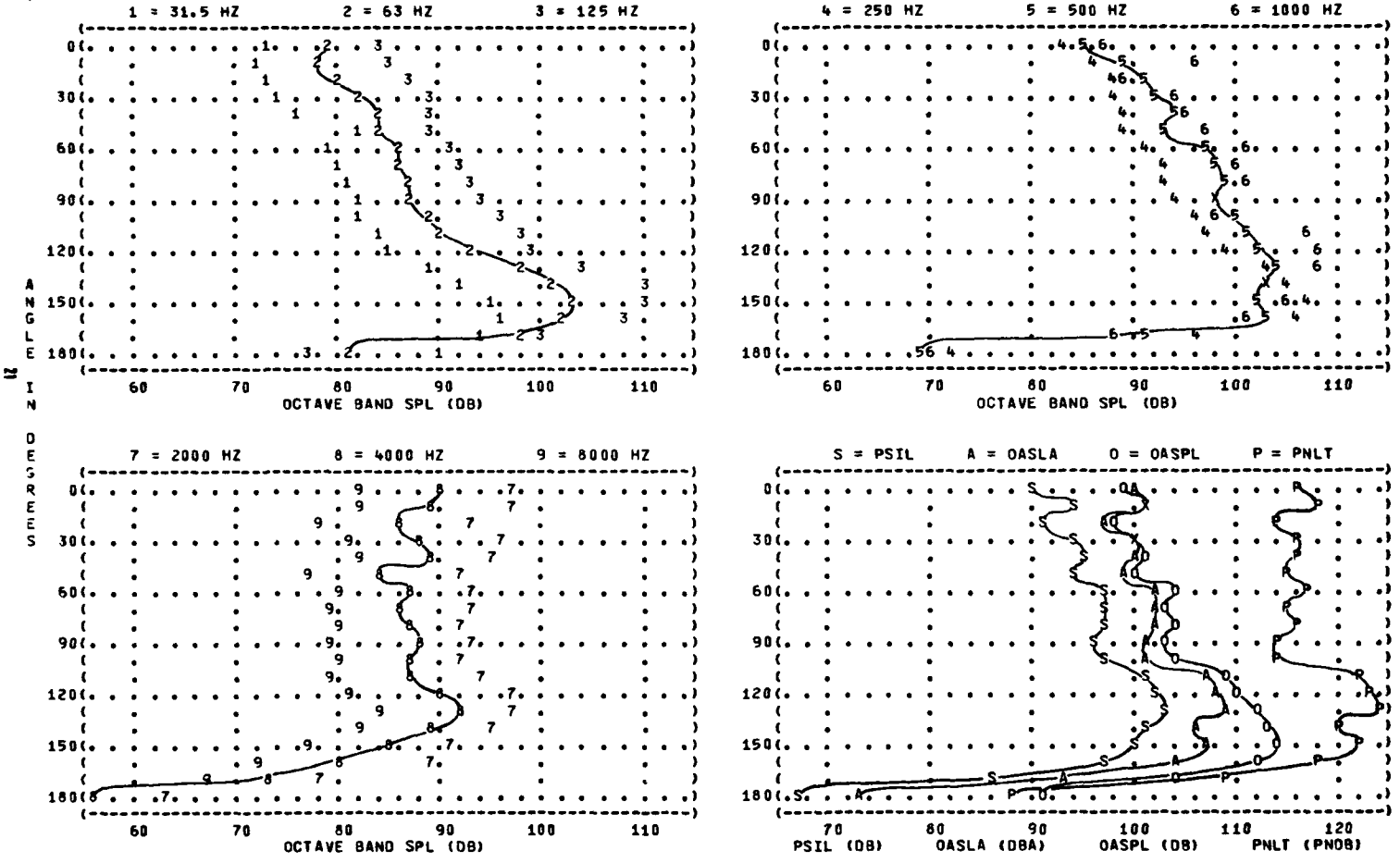


FIGURE: NORMALIZED FARFIELD NOISE LEVELS

3

DISTANCE = 100 METERS

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 03

02 AUG 76

PAGE 6

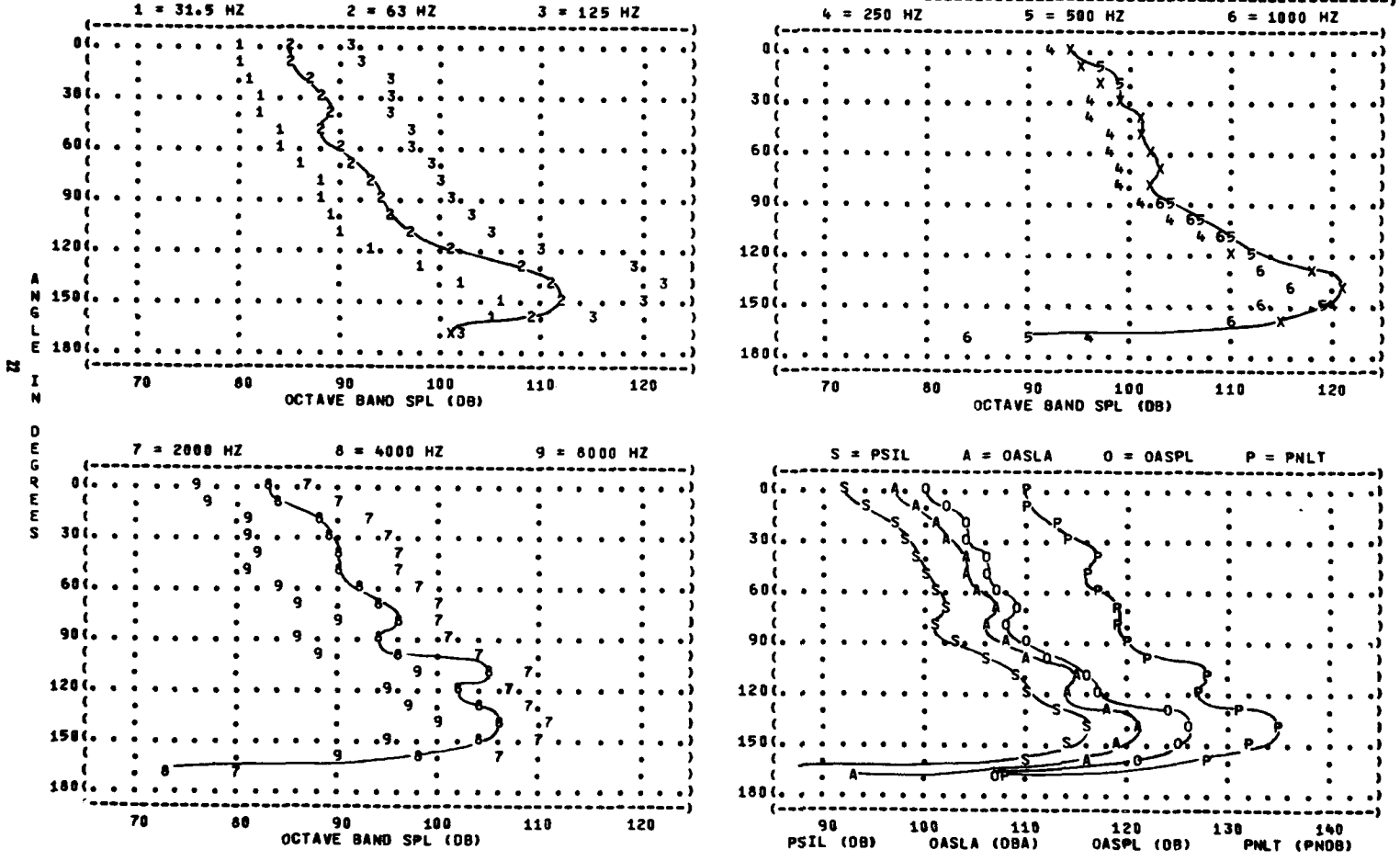


FIGURE: 3 NORMALIZED FARFIELD NOISE LEVELS

DISTANCE = 100 METERS

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 04
02 AUG 76
PAGE 6

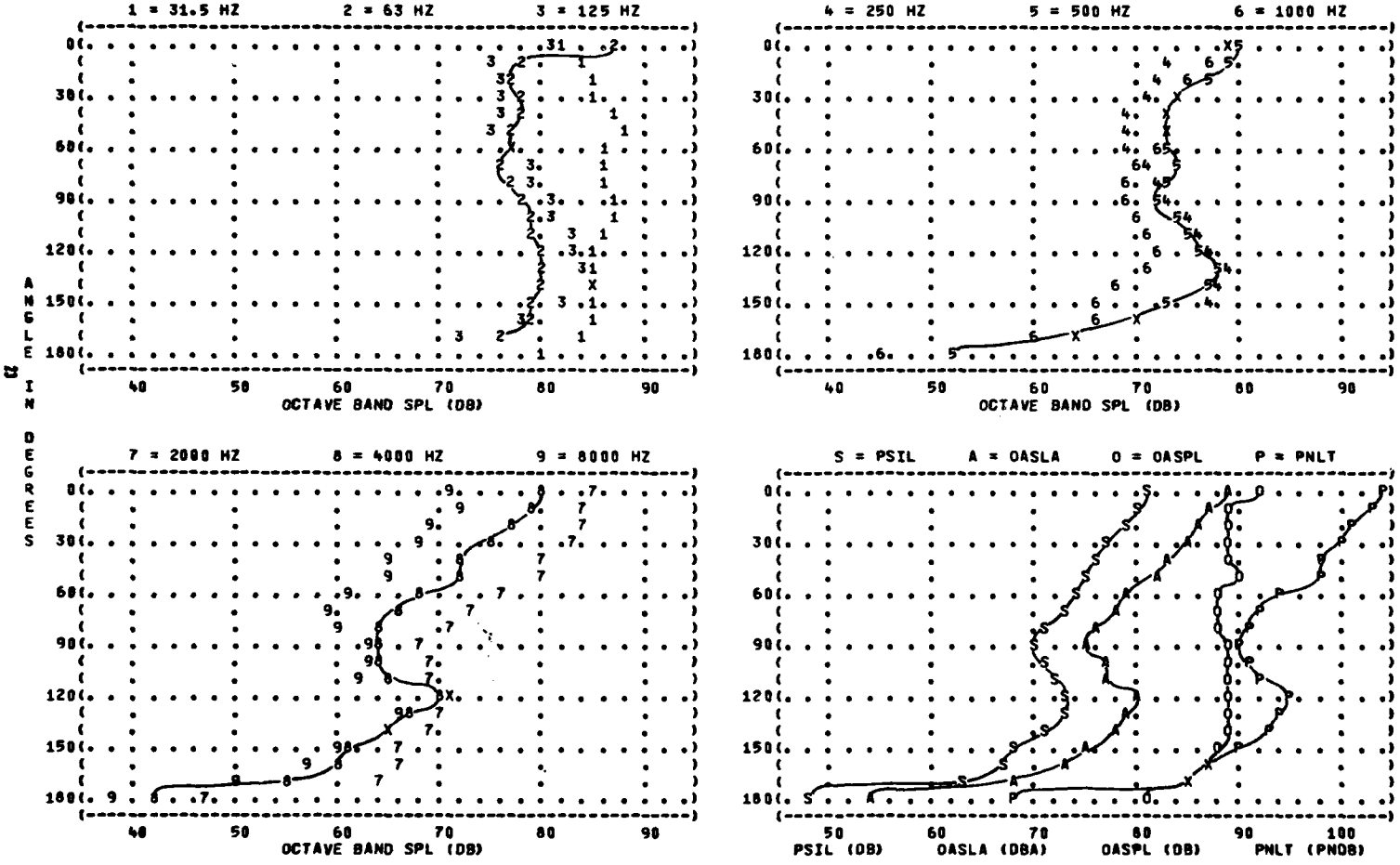


FIGURE: NORMALIZED FARFIELD NOISE LEVELS

3

DISTANCE = 100 METERS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 05

02 AUG 76

PAGE 6

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

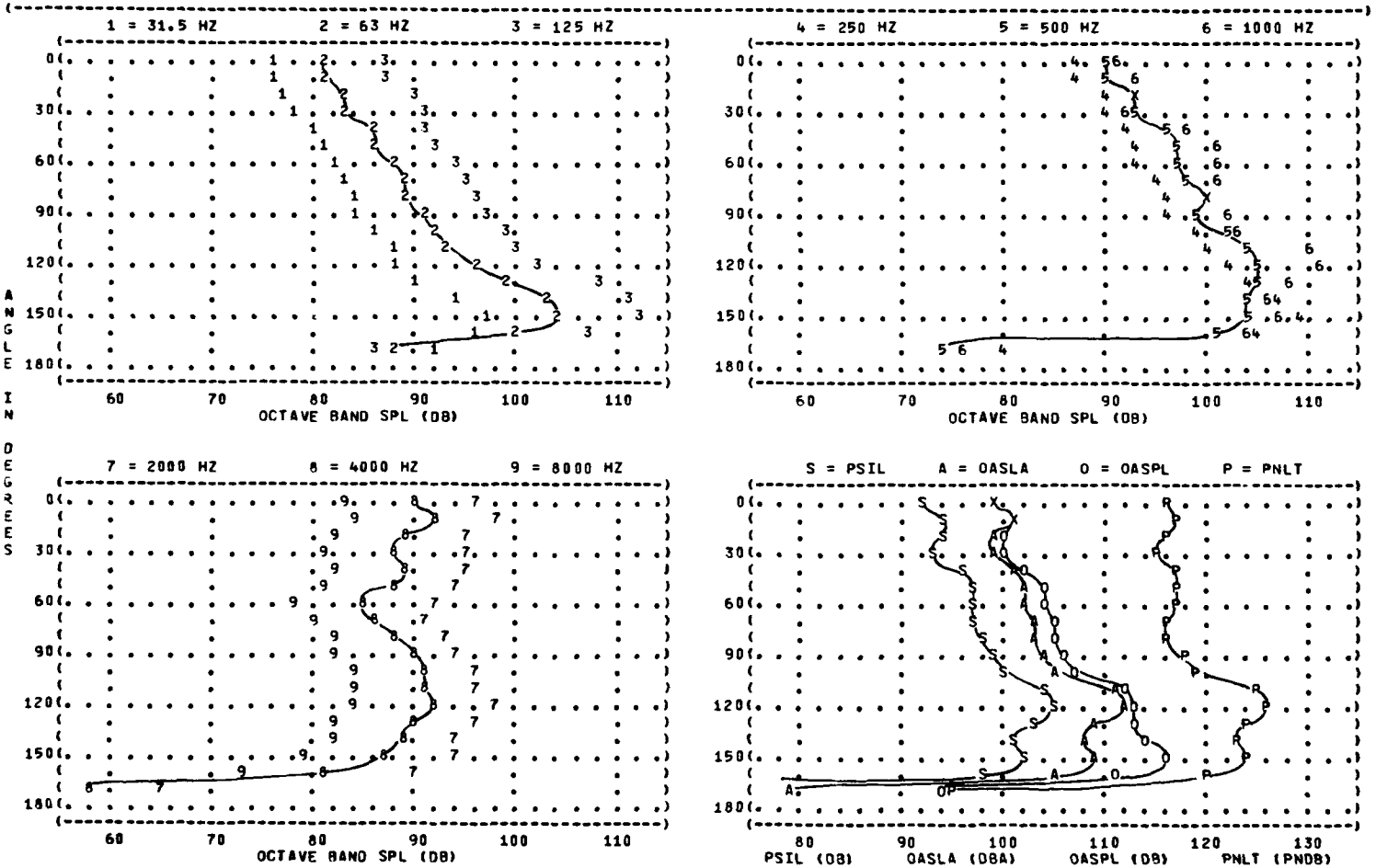


FIGURE: NORMALIZED FARFIELD NOISE LEVELS

3

DISTANCE = 100 METERS

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
DEFLECTED FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-059
RUN 03
09 AUG 76
PAGE 6

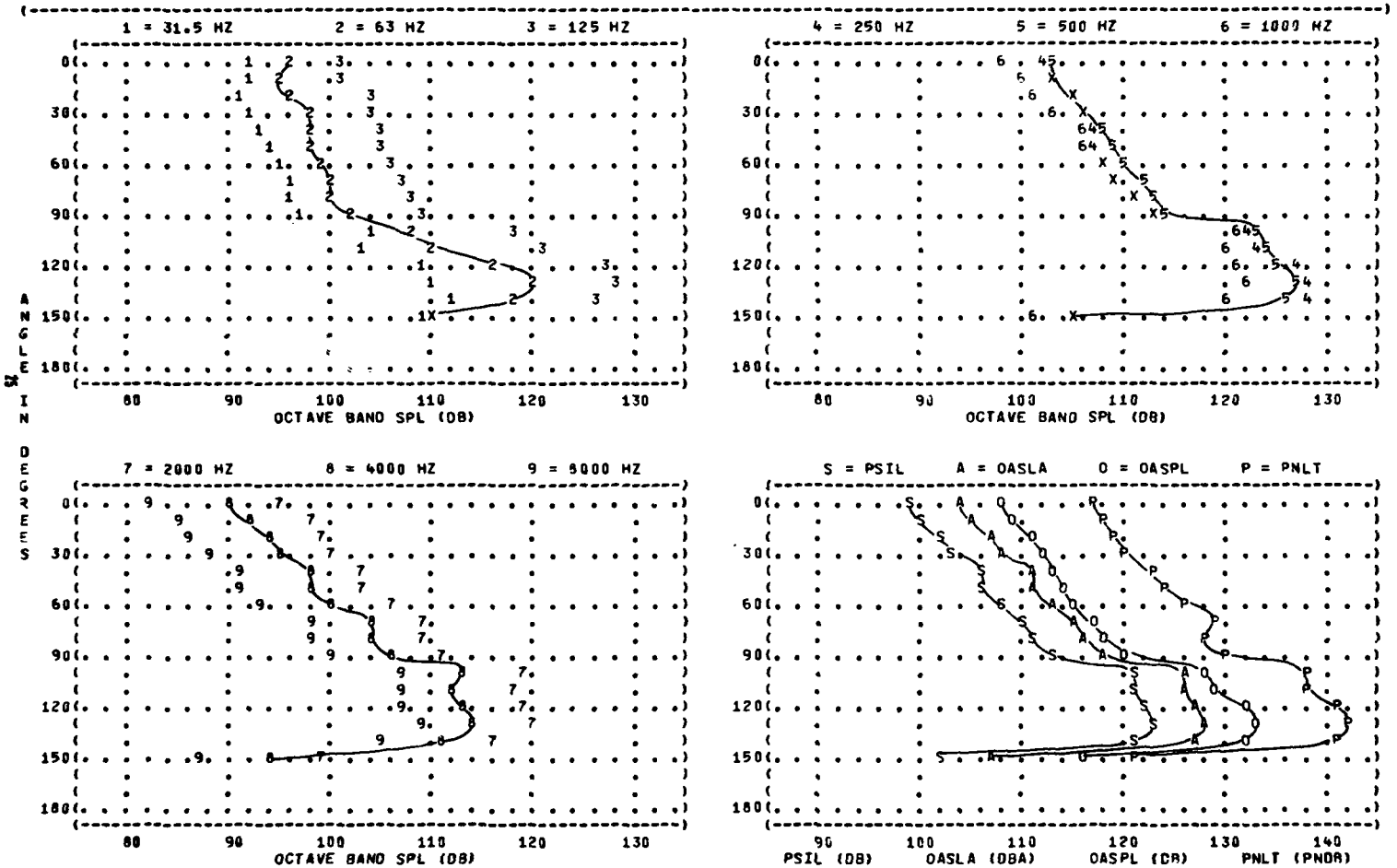


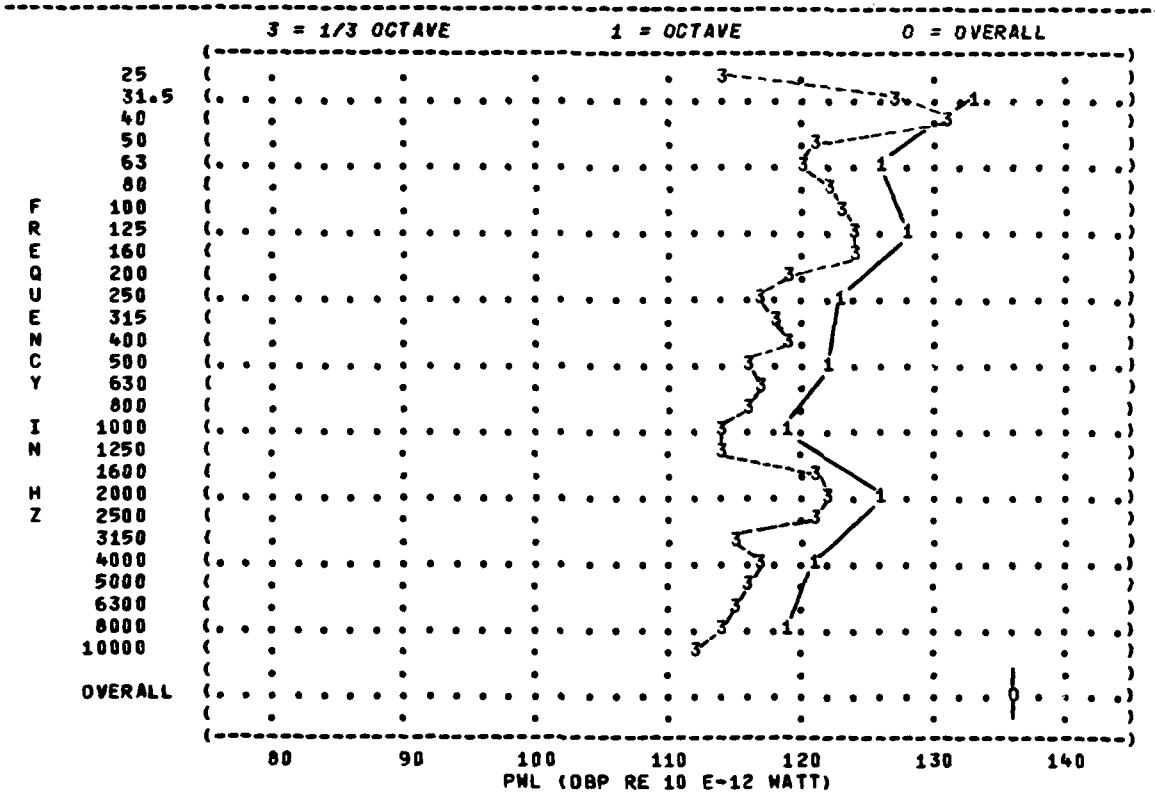
FIGURE: 4 ACOUSTIC POWER LEVEL (PWL)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-059
RUN 01
09 AUG 76
PAGE 3

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
65% RPM
SINGLE ENGINE
DEFLECTED FLOW

METEOROLOGY:
TEMP = 31 C
BAR PRESS = .761 M HG
REL HUMID = 55 %

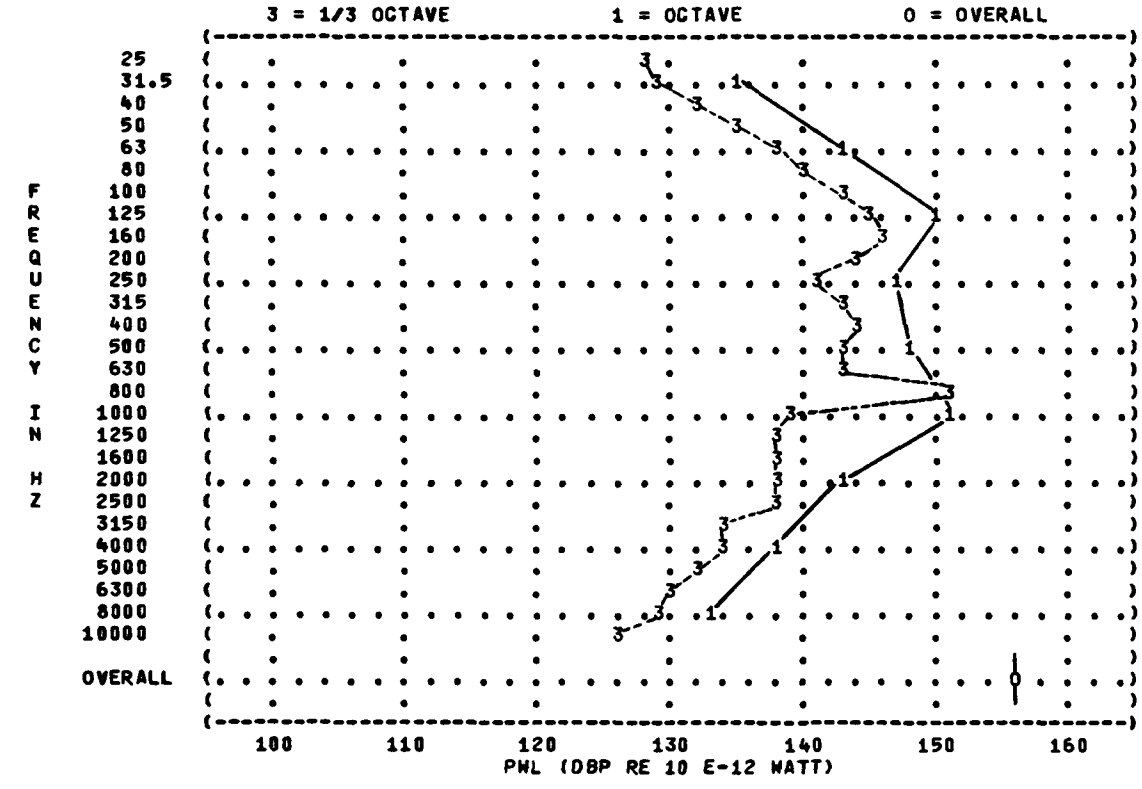


1/3 OCTAVE	PWL OCTAVE
113.8	
127.3	132.7
131.1	
120.8	
120.3	126.0
122.3	
123.0	
123.6	128.4
124.2	
118.6	
116.7	122.6
118.1	
119.1	
115.7	122.4
117.5	
116.0	
114.1	119.5
113.5	
120.9	
122.0	126.0
120.6	
115.4	
117.3	121.8
115.7	
115.4	
114.0	118.7
111.7	
	136.0

FIGURE: ACOUSTIC POWER LEVEL (PWL)

4

NOISE SOURCE/SUBJECT:	OPERATION:	METEOROLOGY:	IDENTIFICATION:
F-4C AIRCRAFT	85% RPM	TEMP = 26 C	OMEGA 1.4
J79-GE-15/A ENGINE	SINGLE ENGINE	BAR PRESS = .761 M HG	TEST 75-002-026
GROUND RUNUP NOISE	FREE FLOW	REL HUMID = 65 %	RUN 02
			02 AUG 76
			PAGE 3



	PWL 1/3 OCTAVE	PWL OCTAVE
25	128.0	
31.5	129.4	135.1
40	132.3	
50	134.7	
63	138.2	142.8
80	139.8	
100	143.3	
125	145.2	149.9
160	146.5	
200	143.9	
250	141.3	147.5
315	142.6	
400	144.1	
500	142.8	148.0
630	142.6	
800	150.7	
1000	138.8	151.2
1250	138.1	
1600	138.0	
2000	137.9	142.9
2500	138.4	
3150	133.6	
4000	133.7	137.9
5000	131.7	
6300	129.9	
8000	129.1	133.5
10000	126.3	
OVERALL		156.0

FIGURE: 4 ACOUSTIC POWER LEVEL (PWL)

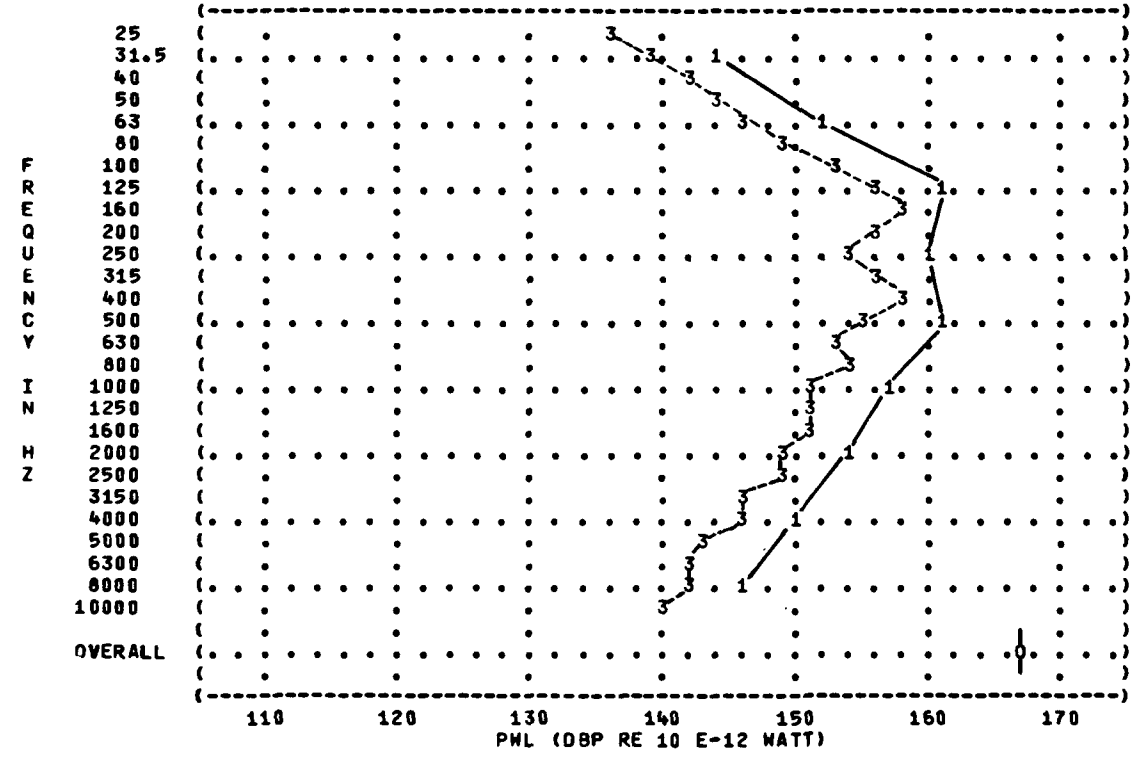
NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 26 C
BAR PRESS = .761 M HG
REL HUMID = 65 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 03
02 AUG 76
PAGE 3

3 = 1/3 OCTAVE 1 = OCTAVE 0 = OVERALL



	1/3 OCTAVE PWL	OCTAVE PWL
25	136.5	
31.5	138.5	144.5
40	142.1	
50	143.5	
63	146.3	151.6
80	148.9	
100	153.4	
125	155.8	160.7
160	157.7	
200	155.9	
250	154.3	160.3
315	156.2	
400	157.8	
500	155.4	160.7
630	153.4	
800	153.6	
1000	150.8	156.7
1250	150.8	
1600	150.6	
2000	149.1	154.3
2500	146.7	
3150	146.2	
4000	146.2	150.2
5000	143.4	
6300	142.3	
8000	142.1	146.5
10000	140.3	
OVERALL	166.5	

FREQUENCY (HZ)

PWL (DBP RE 10 E-12 WATT)

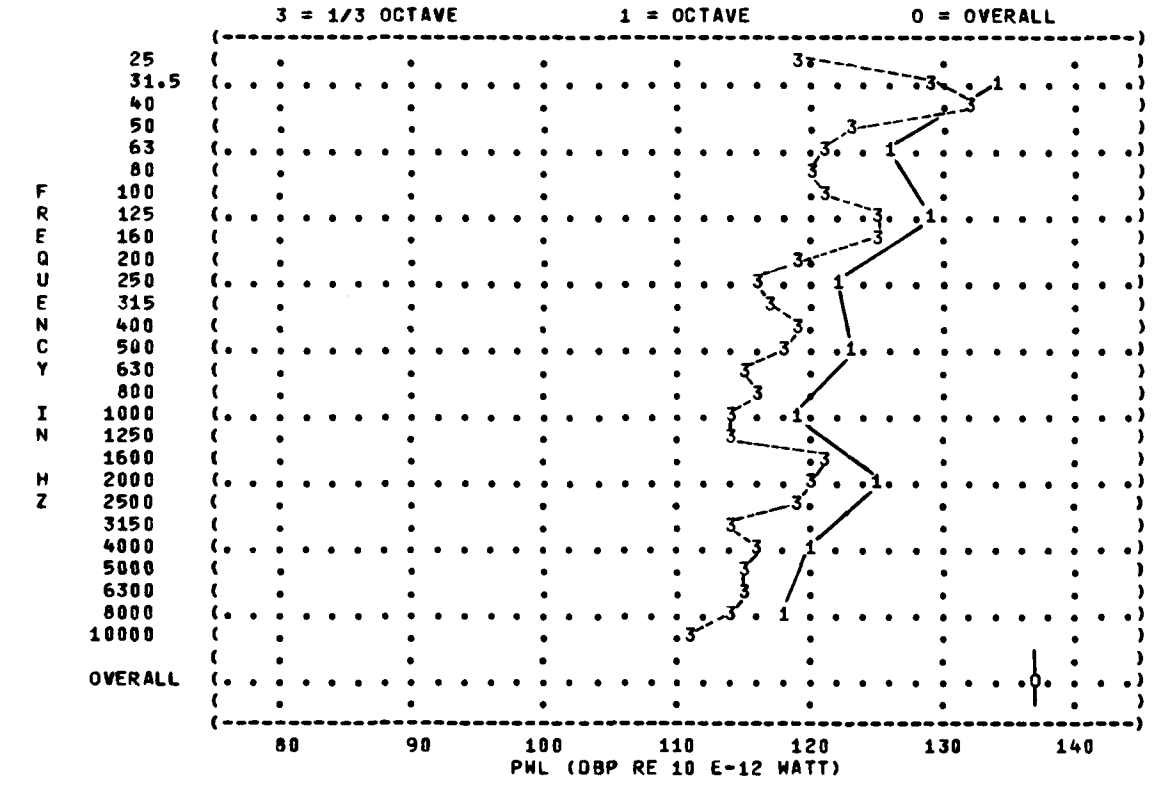
FIGURE: 4 ACOUSTIC POWER LEVEL (PWL)

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 26 C
BAR PRESS = .761 M HG
REL HUMID = 65 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 04
02 AUG 76
PAGE 3



PWL	1/3 OCTAVE	OCTAVE
	118.7	
	128.7	133.9
	132.1	
	123.0	
	120.9	126.2
	119.7	
	121.0	
	124.7	128.8
	125.2	
	119.0	
	116.4	122.4
	117.1	
	119.3	
	118.2	122.7
	115.2	
	115.8	
	114.1	119.5
	114.0	
	121.5	
	120.0	125.0
	118.7	
	113.9	
	116.5	120.0
	114.8	
	114.7	
	114.2	118.4
	111.2	
	136.6	

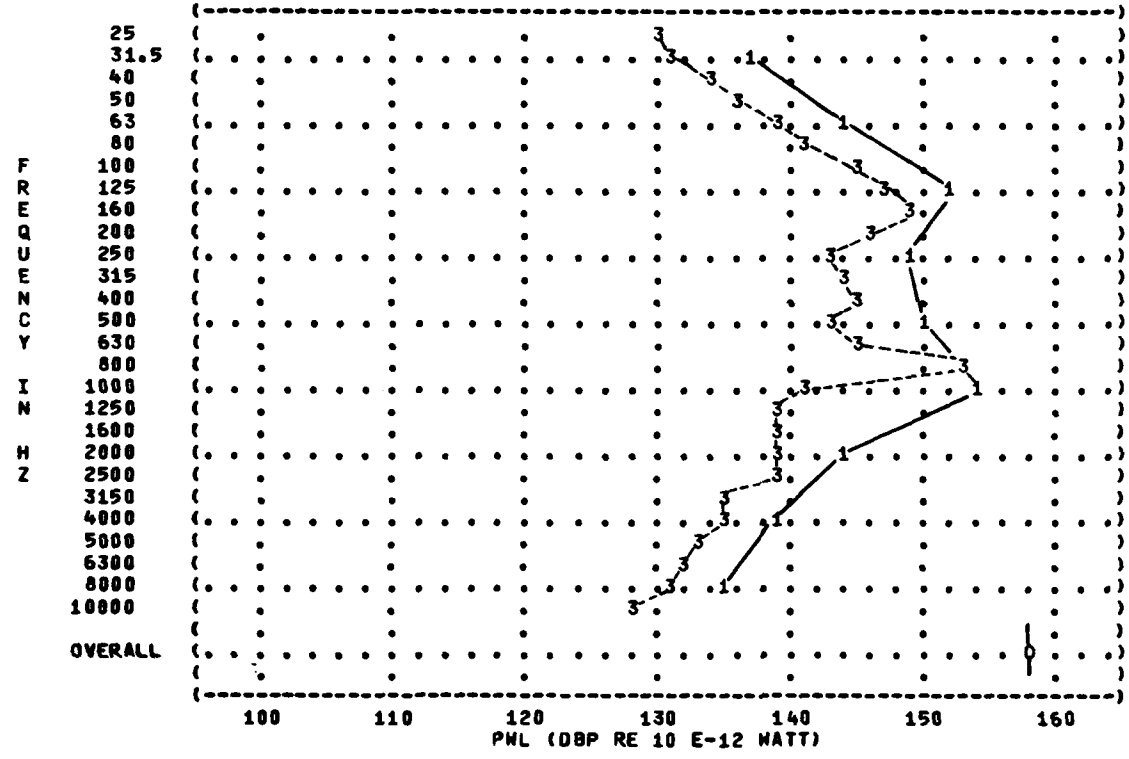
FIGURE: 4 ACOUSTIC POWER LEVEL (PWL)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 05
02 AUG 76
PAGE 3

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 26 C
BAR PRESS = .761 M HG
REL HUMID = 65 %



	PWL 1/3 OCTAVE	PWL OCTAVE
25	129.5	
31.5	131.5	136.6
40	133.6	
50	136.0	
63	139.3	143.9
80	140.8	
100	144.6	
125	146.5	151.8
160	148.9	
200	145.7	
250	142.7	149.1
315	144.0	
400	145.2	
500	143.4	149.5
630	145.4	
800	153.3	
1000	140.6	153.7
1250	139.4	
1600	139.4	
2000	138.5	143.8
2500	139.0	
3150	134.8	
4000	135.2	139.3
5000	133.4	
6300	131.7	
8000	130.8	135.2
10000	128.2	
OVERALL		157.9

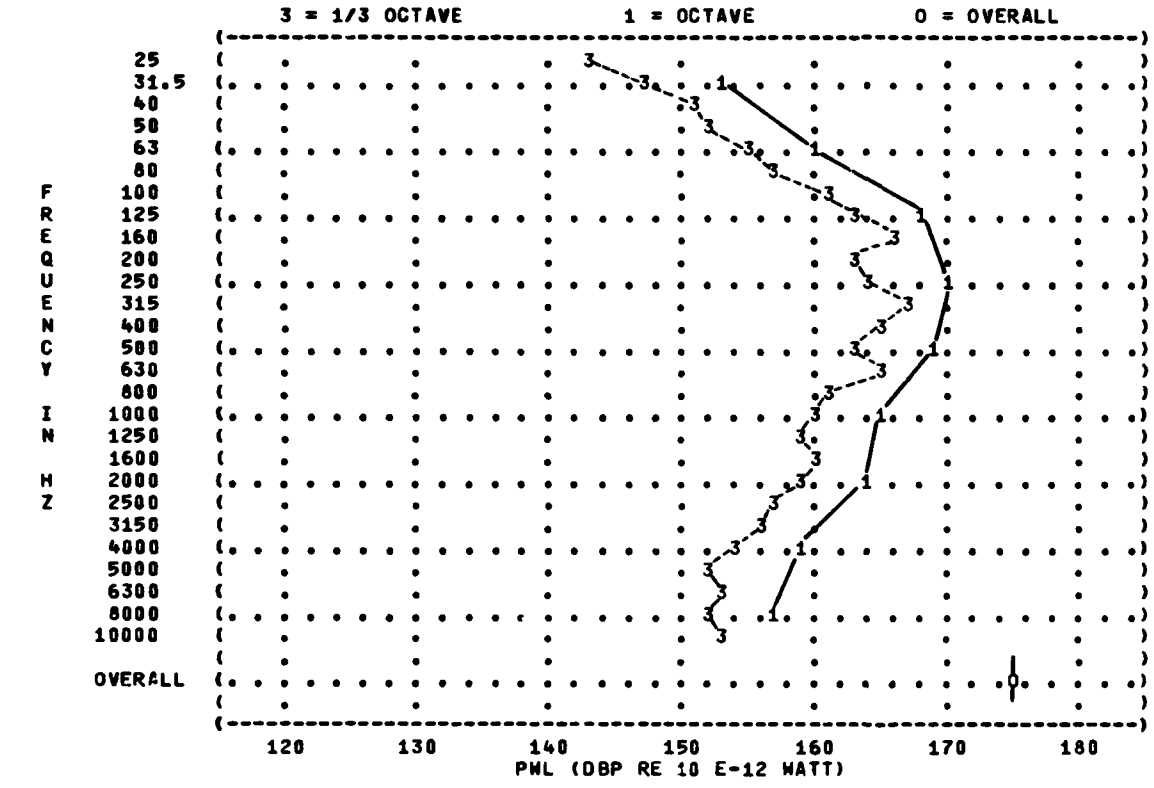
FIGURE: 4 ACOUSTIC POWER LEVEL (PWL)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-059
RUN 03
09 AUG 76
PAGE 3

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
DEFLECTED FLOW

METEOROLOGY:
TEMP = 31 C
BAR PRESS = .761 M HG
REL HUMID = 55 %



	PWL 1/3 OCTAVE	PWL OCTAVE
25	143.1	
31.5	147.2	152.7
40	150.5	
50	151.7	
63	154.5	159.7
80	157.0	
100	160.8	
125	163.2	168.4
160	165.5	
200	163.0	
250	163.7	169.5
315	166.6	
400	164.8	
500	162.7	169.1
630	165.0	
800	161.4	
1000	160.5	165.3
1250	159.5	
1600	159.9	
2000	158.9	163.5
2500	156.9	
3150	155.8	
4000	154.4	159.2
5000	152.3	
6300	152.6	
8000	151.6	157.1
10000	152.7	
OVERALL		175.0

TABLE: 6 DIRECTIVITY INDEX (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 01
02 AUG 76
PAGE 4

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 26 C
BAR PRESS = .761 M HG
REL HUMID = 65 %

FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1/3 OCTAVE																			
25	-5	-6	-5	2	-5	-3	-1	-0	2	2	-1	0	-1	-0	2	-1	2	1	0
31.5	-5	-3	-3	-1	-3	-1	1	2	2	2	-1	-1	-2	0	-2	-1	0	-2	-2
40	-4	-2	-3	-0	-2	-0	-0	1	2	1	-1	-0	-0	0	0	0	-1	-2	-2
50	-4	-3	-4	-0	-1	-1	-1	-1	0	0	-0	0	1	2	1	-1	-1	-2	-3
63	-5	-7	-4	0	-2	-4	-5	-2	-2	-0	-1	1	3	2	2	2	3	-1	-4
80	-8	-7	-5	1	-4	-5	-4	-4	0	2	-0	-2	1	3	3	2	3	-1	-7
100	-10	-7	-4	-1	-6	-4	-4	-1	1	1	-0	-0	1	1	3	2	1	-4	
125	-11	-8	-5	-4	-5	-5	-4	-2	-0	-0	1	2	3	3	1	1	-1	-8	-13
160	-13	-9	-6	-4	-4	-7	-3	-1	-0	1	-0	-0	3	4	3	2	-2	-10	-14
200	-8	-5	-4	-3	-6	-8	-3	-3	-2	0	1	1	2	4	5	2	-2	-9	
250	-6	-4	-3	-1	-7	-6	-7	-6	-5	-3	-1	2	4	4	5	1	-4	-7	
315	-4	-1	-1	-1	-4	-4	-5	-3	-2	-1	-1	-1	3	5	3	2	-5	-6	-11
400	-3	0	-0	-3	-3	-5	-5	1	0	-0	1	2	2	2	1	-1	-4	-8	-14
500	3	6	3	-1	-1	-5	-0	1	1	-0	-3	-2	2	3	0	-3	-4	-9	-19
630	2	3	1	3	2	-0	0	1	-0	-1	-2	-1	2	2	-2	-6	-8	-8	-20
800	5	3	2	1	2	-2	1	1	1	0	-2	-1	1	1	-2	-4	-7	-11	-23
1000	6	5	6	4	4	0	-0	-1	0	-2	-3	-1	-1	-1	-5	-7	-7	-6	-21
1250	7	6	6	5	3	1	-2	-2	-1	-3	-3	-1	1	-3	-5	-7	-7	-7	-22
1600	11	9	7	7	3	1	0	0	-2	-8	-9	-10	-8	-9	-10	-12	-14	-14	-28
2000	9	10	8	7	2	1	-0	-0	-3	-7	-8	-7	-7	-7	-9	-12	-11	-11	-27
2500	6	11	8	7	3	1	-3	-3	-4	-8	-9	-8	-8	-8	-9	-12	-12	-12	-27
3150	6	8	7	8	2	1	-1	-1	-2	-5	-6	-5	-5	-6	-7	-10	-12	-12	-26
4000	7	9	7	7	2	2	-1	-2	-2	-6	-5	-5	-5	-5	-6	-9	-12	-13	-28
5000	6	8	6	7	2	2	-1	-2	-3	-6	-3	-2	-2	-3	-5	-7	-12	-13	-28
6300	5	7	5	5	1	1	-3	-3	-2	-5	1	1	0	-0	-1	-4	-9	-11	-27
8000	5	7	6	5	1	1	-3	-4	-3	-6	-0	-1	-0	-1	-1	-4	-8	-11	-26
10000	5	7	7	5	1	1	-3	-3	-3	-5	-0	-1	-0	-1	-1	-4	-8	-11	
OCTAVE																			
31.5	-4	-2	-3	-1	-2	-0	0	2	2	1	-1	-1	-1	0	-0	-0	-1	-2	-2
63	-5	-5	-5	0	-2	-2	-2	-2	-0	1	-0	0	2	2	2	1	2	-1	-4
125	-11	-8	-5	-3	-5	-6	-4	-1	-0	1	0	1	3	3	2	1	-1	-7	-14
250	-6	-3	-2	-2	-6	-5	-4	-4	-3	-1	-0	1	3	4	4	2	-3	-7	
500	1	4	1	-1	-1	-4	-2	1	0	-0	-0	0	2	2	0	-2	-4	-8	-16
1000	6	5	5	4	3	-0	-0	-0	0	-2	-3	-1	0	-1	-4	-6	-7	-8	-22
2000	9	10	7	7	3	1	-0	-1	-3	-8	-8	-8	-8	-8	-9	-12	-12	-12	-27
4000	6	8	7	7	2	2	-1	-2	-2	-6	-4	-4	-4	-4	-6	-8	-12	-13	-27
8000	5	7	6	5	1	1	-3	-4	-3	-5	0	0	-0	-1	-1	-4	-8	-11	-27
OVERALL	2	3	1	2	-1	-1	-1	0	1	0	-1	-1	0	1	0	-0	-1	-4	-5

TABLE: DIRECTIVITY INDEX (DB)

6

IDENTIFICATION:

OMEGA 1.4
TEST 75-002-026
RUN 02
02 AUG 76
PAGE 4

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 26 C
BAR PRESS = .761 M HG
REL HUMID = 65 %

FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1/3 OCTAVE																			
25	-14	-15	-16	-14	-12	-3	-8	-8	-8	-6	-4	-3	-2	2	5	7	8	7	5
31.5	-14	-14	-14	-12	-11	-6	-9	-8	-7	-5	-5	-4	-2	2	4	7	9	8	3
40	-15	-16	-14	-13	-11	-7	-9	-7	-6	-6	-5	-3	-3	2	6	8	8	6	-0
50	-16	-16	-15	-13	-11	-9	-8	-7	-7	-6	-4	-4	-2	2	6	7	7	5	-8
63	-17	-17	-16	-14	-11	-11	-10	-8	-7	-8	-6	-5	-1	2	6	9	7	3	-15
80	-16	-17	-15	-13	-12	-12	-9	-10	-10	-8	-6	-5	-2	4	6	8	7	2	-22
100	-17	-18	-15	-12	-13	-13	-12	-10	-10	-7	-5	-5	-4	3	8	8	6	0	-26
125	-19	-18	-16	-13	-13	-12	-12	-10	-9	-8	-7	-4	-3	2	8	8	5	-2	-25
160	-18	-17	-14	-14	-13	-13	-11	-10	-9	-9	-6	-4	-2	2	7	8	6	-3	-25
200	-17	-14	-12	-12	-12	-12	-10	-9	-9	-8	-5	-3	-1	3	7	9	6	-4	-27
250	-16	-14	-12	-12	-11	-10	-10	-8	-8	-6	-4	-3	-0	3	6	8	6	-3	-27
315	-16	-13	-10	-10	-9	-9	-6	-5	-4	-4	-2	-2	1	4	4	6	7	-4	-28
400	-16	-13	-9	-8	-6	-7	-4	-3	-2	-2	-0	-0	1	4	4	3	5	-6	-30
500	-16	-13	-9	-8	-4	-6	-3	-2	-2	0	1	1	3	4	3	1	-0	-13	-32
630	-13	-8	-9	-7	-7	-6	-2	-2	-0	-3	-1	2	3	5	3	2	1	-13	-32
800	-16	-6	-14	-9	-8	-6	-2	-4	-2	-6	-6	4	5	5	-0	2	-2	-15	-34
1000	-14	-11	-10	-8	-7	-7	-4	-2	-1	-1	-0	1	2	5	5	3	0	-13	-30
1250	-12	-10	-9	-7	-5	-7	-3	0	-0	0	0	2	2	4	4	1	-3	-15	-31
1600	-9	-8	-8	-5	-5	-6	-3	-1	-1	1	-0	1	4	4	2	-2	-3	-16	-29
2000	5	4	-0	3	1	-3	-2	-2	-2	-1	-2	0	2	3	1	-2	-6	-16	-32
2500	5	5	2	3	3	0	1	-1	-3	-2	-3	-2	1	2	-1	-4	-9	-16	-33
3150	-1	-1	-3	-1	-1	-5	-2	-2	-1	-0	-1	0	3	4	2	-3	-8	-16	-31
4000	3	2	-2	0	1	-4	-1	-1	-0	0	-1	-1	2	4	2	-3	-8	-15	-31
5000	3	3	-1	2	3	-3	1	-1	-1	-1	-2	-2	0	4	1	-4	-9	-15	-32
6300	2	1	-3	1	2	-3	-0	-1	-0	-1	-1	-1	1	4	2	-3	-8	-14	-33
8000	1	2	-1	1	3	-3	1	-1	-0	-2	0	-1	1	3	1	-3	-7	-12	-34
10000	1	1	-1	1	1	-2	-0	-1	0	-2	1	-1	1	3	0	-2	-7	-12	-33
OCTAVE																			
31.5	-14	-15	-14	-13	-11	-6	-9	-7	-7	-6	-5	-4	-2	2	5	7	8	7	2
63	-16	-17	-15	-13	-11	-11	-9	-9	-8	-8	-6	-5	-2	3	6	8	7	3	-14
125	-18	-17	-15	-13	-13	-13	-11	-10	-9	-8	-6	-4	-3	2	8	8	6	-2	-25
250	-17	-14	-11	-11	-11	-10	-8	-7	-6	-6	-4	-3	-0	4	6	8	7	-4	-27
500	-15	-11	-9	-8	-6	-6	-3	-2	-1	-2	-0	1	2	4	4	2	3	-9	-31
1000	-16	-7	-14	-9	-8	-6	-2	-3	-2	-5	-5	4	5	5	0	2	-2	-15	-33
2000	3	3	-1	2	1	-2	-1	-1	-2	-1	-2	0	2	3	1	-3	-5	-16	-31
4000	2	1	-2	0	1	-4	-1	-2	-1	-0	-1	-0	2	4	2	-3	-8	-15	-31
8000	1	1	-2	1	2	-3	0	-1	-0	-1	-0	-1	1	3	1	-3	-8	-13	-33
OVERALL	-9	-7	-10	-8	-7	-7	-4	-5	-4	-5	-4	1	2	4	5	6	4	-4	-17

TABLE: DIRECTIVITY INDEX (DB)

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NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 26 C
BAR PRESS = .761 M HG
REL HUMID = 65 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 03
02 AUG 76
PAGE 4

FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1/3 OCTAVE																			
25	-16	-14	-15	-14	-13	-11	-12	-10	-9	-7	-7	-5	-4	2	5	9	8	6	
31.5	-16	-16	-15	-13	-13	-13	-12	-11	-10	-8	-6	-5	-3	2	5	9	8	5	
40	-18	-18	-16	-16	-15	-13	-13	-11	-9	-10	-8	-8	-4	2	6	9	8	3	
50	-17	-17	-17	-16	-15	-16	-13	-12	-10	-10	-9	-7	-4	1	7	9	7	2	
63	-18	-19	-18	-16	-13	-15	-14	-12	-9	-10	-9	-8	-3	3	7	9	6	-2	
80	-20	-20	-17	-17	-16	-16	-15	-15	-13	-10	-9	-7	-2	5	7	8	4	-5	
100	-21	-20	-19	-17	-17	-16	-16	-13	-13	-11	-10	-8	-2	5	9	7	3	-8	
125	-22	-21	-18	-18	-18	-15	-16	-14	-13	-12	-10	-9	-3	6	9	7	1	-10	
160	-21	-20	-18	-18	-17	-16	-16	-14	-13	-13	-10	-8	-3	6	9	7	1	-13	
200	-20	-17	-16	-16	-17	-15	-14	-14	-13	-12	-7	-7	-3	5	9	7	2	-15	
250	-20	-16	-17	-16	-15	-14	-16	-13	-13	-11	-9	-6	-2	4	8	8	2	-16	
315	-20	-19	-15	-16	-16	-14	-15	-14	-13	-11	-8	-5	-1	6	8	8	3	-18	
400	-19	-17	-15	-16	-15	-14	-14	-12	-12	-10	-8	-4	-2	5	8	7	2	-22	
500	-18	-16	-14	-13	-10	-11	-9	-8	-10	-7	-4	-1	0	5	7	6	3	-23	
630	-17	-14	-12	-12	-10	-10	-9	-9	-9	-8	-5	-1	1	5	8	5	3	-23	
800	-14	-13	-11	-9	-7	-7	-7	-6	-8	-5	-2	-0	1	5	7	5	1	-25	
1000	-15	-14	-11	-9	-8	-7	-6	-6	-7	-5	-3	0	1	4	7	5	3	-23	
1250	-16	-14	-12	-9	-8	-9	-7	-4	-6	-4	-1	2	1	4	6	5	2	-24	
1600	-18	-15	-12	-10	-10	-10	-7	-5	-5	-4	-1	3	2	3	6	4	0	-25	
2000	-19	-16	-13	-11	-10	-9	-8	-6	-5	-5	-1	4	1	4	6	4	0	-25	
2500	-18	-16	-13	-11	-8	-8	-7	-5	-5	-5	-3	4	2	4	6	4	-0	-26	
3150	-18	-16	-13	-11	-9	-9	-8	-6	-5	-6	-3	5	2	4	6	4	-1	-26	
4000	-17	-16	-13	-11	-11	-11	-8	-6	-4	-5	-4	5	2	4	6	3	-2	-27	
5000	-16	-16	-12	-12	-10	-10	-8	-6	-4	-6	-4	5	2	5	6	3	-3	-28	
6300	-17	-16	-12	-11	-10	-11	-9	-7	-4	-6	-4	5	2	4	6	3	-2	-28	
8000	-17	-16	-13	-12	-10	-12	-10	-8	-3	-7	-5	5	1	4	7	2	-3	-29	
10000	-18	-17	-14	-13	-12	-13	-10	-9	-3	-8	-5	4	2	4	8	1	-3	-30	
OCTAVE																			
31.5	-17	-16	-15	-15	-14	-12	-13	-11	-9	-9	-7	-7	-3	2	5	9	8	4	
63	-19	-19	-17	-16	-15	-15	-14	-13	-11	-10	-9	-7	-3	4	7	9	5	-2	
125	-21	-20	-18	-18	-18	-16	-16	-14	-13	-12	-10	-8	-3	6	9	7	2	-11	
250	-20	-17	-16	-16	-16	-15	-15	-14	-13	-11	-8	-6	-2	5	8	8	3	-16	
500	-18	-16	-14	-14	-12	-12	-11	-9	-11	-8	-6	-2	-0	5	8	7	3	-22	
1000	-15	-14	-11	-9	-7	-7	-6	-6	-7	-5	-2	1	1	4	7	5	2	-24	
2000	-18	-15	-12	-10	-10	-9	-7	-5	-5	-4	-2	4	2	4	6	4	0	-25	
4000	-17	-16	-13	-11	-10	-10	-8	-6	-4	-6	-4	5	2	4	6	3	-2	-27	
8000	-17	-16	-13	-12	-11	-12	-9	-8	-3	-7	-5	5	2	4	7	2	-3	-29	
OVERALL	-19	-17	-15	-14	-13	-12	-11	-10	-10	-9	-6	-2	-1	5	8	7	2	-12	

TABLE: 6 DIRECTIVITY INDEX (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 04
02 AUG 76
PAGE 4

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 26 C
BAR PRESS = .761 M HG
REL HUMID = 65 %

FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1/3 OCTAVE																			
25	-4	-1	-4	-3	-4	-1	-1	-1	-1	-0	1	-1	0	1	1	1	4	2	-0
31.5	-5	-4	-2	-2	1	2	-0	-0	-0	1	2	-0	-1	-1	-1	-0	-1	-1	-4
40	-4	-2	-1	-0	1	2	0	-0	0	1	1	-0	-2	-1	-1	-2	-2	-3	-7
50	11	1	-1	1	0	0	-1	-2	-1	-1	-0	-0	2	1	1	-2	-0	-4	-9
63	1	-4	-3	-2	-0	-4	-1	-3	-2	-1	1	1	2	2	2	2	2	-1	
80	1	-4	-3	-2	-3	-4	-2	-3	-1	0	0	0	1	2	3	2	1	-4	
100	3	-4	-4	-3	-5	-4	-4	-1	-0	1	1	0	2	2	3	2	1	-6	
125	-1	-6	-4	-5	-4	-5	-5	-1	-2	-1	1	3	2	3	3	1	-4	-8	
160	-0	-7	-5	-5	-6	-7	-4	-2	-2	-0	-1	1	3	4	4	2	-6	-11	-18
200	5	-4	-3	-5	-6	-8	-5	-4	-2	-1	1	0	2	4	4	3	-5		
250	6	-2	-2	-4	-6	-5	-6	-5	-3	-3	-0	3	4	2	5	2	-4	-8	
315	2	1	-2	-2	-3	-3	-6	-3	-4	-2	-1	1	4	5	1	3	-4	-8	
400	0	1	-0	-1	-3	-3	-5	-1	-2	-2	1	1	2	3	3	-0	-3	-11	-21
500	7	6	4	-1	-1	-4	1	-0	-1	-2	-1	-1	2	3	1	-4	-6	-11	-24
630	7	6	1	2	1	1	1	-0	-3	-3	-2	1	1	2	-2	-4	-5	-11	
800	8	5	3	2	2	-0	1	-0	-2	-1	-2	-0	1	1	-2	-4	-7	-13	-27
1000	9	6	4	3	3	2	1	-1	-2	-3	-2	-0	-1	-2	-5	-6	-5	-11	-26
1250	8	5	5	4	1	2	-2	-2	-3	-5	-1	0	2	-2	-4	-5	-5	-10	-26
1600	9	7	8	7	4	4	-0	-3	-5	-9	-7	-8	-5	-8	-8	-11	-12	-16	-30
2000	9	8	8	6	3	3	0	-2	-5	-6	-6	-6	-4	-5	-7	-10	-9	-11	-28
2500	9	10	7	5	5	4	-2	-4	-8	-9	-6	-6	-5	-6	-8	-10	-10	-10	-28
3150	11	9	7	5	3	3	-2	-3	-5	-5	-5	-4	-1	-4	-5	-8	-9	-14	-27
4000	11	10	7	5	3	3	-2	-5	-6	-6	-7	-6	-1	-4	-6	-9	-10	-15	-28
5000	9	8	6	5	2	3	-2	-4	-7	-5	-5	-4	3	-2	-4	-8	-10	-15	-28
6300	5	7	3	3	-0	0	-4	-6	-5	-2	-2	-3	6	1	-1	-5	-8	-15	-27
8000	7	7	4	4	0	0	-4	-6	-6	-3	-2	-3	5	1	-0	-5	-8	-15	-27
10000	7	7	5	3	1	0	-3	-5	-5	-2	-2	-2	4	-0	-0	-5	-7	-15	
OCTAVE																			
31.5	-4	-3	-1	-1	1	2	0	-0	0	1	1	-0	-1	-1	-1	-1	-1	-2	-6
63	9	-1	-2	-0	-0	-1	-1	-3	-1	-0	0	0	2	2	2	1	1	-3	
125	0	-6	-5	-5	-5	-5	-4	-1	-1	-0	0	2	2	3	4	1	-3	-9	
250	5	-1	-2	-4	-5	-5	-6	-4	-3	-2	0	2	3	4	4	3	-4	-11	
500	5	4	2	-0	-1	-2	-1	-0	-2	-2	-0	0	2	3	2	-2	-4	-11	-23
1000	8	5	4	3	2	1	0	-1	-2	-3	-1	-0	1	-0	-3	-5	-6	-11	-26
2000	9	8	8	6	4	4	-0	-3	-6	-8	-7	-7	-5	-6	-8	-10	-10	-12	-29
4000	10	9	7	5	3	3	-2	-4	-6	-6	-5	-5	1	-3	-5	-8	-10	-15	-28
8000	6	7	4	3	-0	0	-4	-6	-5	-2	-2	-3	5	1	-0	-5	-8	-15	-27
OVERALL	3	1	1	0	0	1	-1	-1	-1	-0	1	0	0	1	1	-1	-2	-4	-8

TABLE: DIRECTIVITY INDEX (DB)

6

IDENTIFICATION:

OMEGA 1.4
TEST 75-002-026
RUN 05
02 AUG 76
PAGE 4

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 26 C
BAR PRESS = .761 M HG
REL HUMID = 65 %

FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1/3 OCTAVE																			
25	-14	-12	-13	-10	-11	-9	-7	-6	-3	-4	-2	-1	-2	2	5	7	7	5	
31.5	-13	-13	-11	-11	-9	-8	-7	-6	-5	-5	-3	-2	0	1	4	6	8	4	
40	-13	-13	-11	-11	-9	-8	-6	-6	-5	-4	-3	-1	-1	1	6	8	6	1	
50	-15	-14	-12	-13	-9	-9	-8	-6	-6	-5	-2	-2	0	3	6	8	5	-5	
63	-15	-16	-14	-13	-8	-10	-8	-8	-7	-5	-4	-2	1	2	7	8	4	-8	
80	-15	-15	-13	-12	-11	-10	-8	-8	-7	-6	-5	-4	-0	4	7	8	5	-11	
100	-16	-17	-13	-12	-12	-11	-9	-8	-7	-5	-5	-4	-2	4	8	8	4	-15	
125	-17	-17	-15	-12	-12	-11	-10	-8	-8	-7	-5	-3	-1	4	7	8	4	-17	
160	-16	-17	-14	-14	-13	-13	-10	-9	-8	-8	-5	-4	-2	4	8	9	3	-19	
200	-16	-15	-12	-12	-12	-11	-10	-9	-8	-7	-5	-3	-1	3	7	9	3	-20	
250	-14	-14	-12	-12	-10	-7	-9	-7	-5	-5	-3	-2	1	3	5	8	4	-21	
315	-12	-12	-9	-9	-7	-6	-6	-4	-2	-3	0	1	2	4	4	6	3	-25	
400	-12	-12	-9	-9	-6	-5	-5	-3	-2	-2	1	1	2	4	4	4	2	-27	
500	-12	-11	-9	-9	-5	-5	-2	-4	-2	-2	-0	1	4	4	3	2	-1	-28	
630	-10	-10	-9	-9	-6	-5	-5	-2	-2	-3	0	4	4	3	0	1	-3	-29	
800	-15	-13	-13	-14	-8	-5	-4	-4	-6	-4	-4	5	6	3	-0	2	-2	-30	
1000	-11	-13	-10	-9	-7	-6	-6	-3	-1	-1	1	3	2	4	2	3	-2	-28	
1250	-10	-11	-9	-8	-5	-4	-5	-3	-1	-1	1	4	4	3	1	1	-3	-30	
1600	-8	-8	-8	-6	-4	-2	-4	-4	-2	-0	1	3	5	2	-0	0	-3	-29	
2000	2	5	0	1	-1	-1	-4	-3	-1	-1	1	1	2	2	-0	-1	-5	-30	
2500	4	5	4	3	3	1	-1	-3	-2	-1	0	-0	2	0	-2	-2	-8	-32	
3150	-1	1	-1	-2	-2	-2	-5	-3	-1	0	2	2	4	2	-0	-1	-7	-30	
4000	2	3	-0	-1	-0	-1	-5	-3	-1	1	2	2	3	1	-0	-2	-9	-31	
5000	3	4	1	-1	1	0	-3	-3	-1	0	1	1	2	-0	-1	-3	-10	-32	
6300	1	2	-0	-1	-0	-1	-5	-2	-0	1	2	2	2	-1	-0	-3	-10	-32	
8000	1	3	0	-1	0	-0	-4	-2	0	0	2	2	2	0	0	-3	-9	-32	
10000	1	2	0	-2	0	-0	-4	-2	-0	0	2	2	3	0	0	-3	-8	-31	
OCTAVE																			
31.5	-13	-13	-12	-11	-9	-8	-7	-6	-5	-4	-3	-1	-1	1	5	8	7	3	
63	-15	-15	-13	-13	-10	-10	-8	-7	-7	-5	-4	-3	0	3	7	8	4	-8	
125	-17	-17	-14	-13	-13	-12	-10	-9	-8	-7	-5	-4	-2	4	7	8	3	-18	
250	-14	-14	-11	-11	-9	-8	-8	-7	-5	-5	-2	-1	1	3	6	8	3	-21	
500	-11	-11	-9	-9	-6	-5	-4	-3	-2	-2	0	3	4	4	3	3	-0	-28	
1000	-15	-13	-13	-13	-7	-5	-4	-4	-5	-3	-3	5	6	3	0	2	-2	-30	
2000	1	3	0	0	-0	-1	-3	-4	-2	-1	1	1	3	2	-1	-1	-5	-30	
4000	1	3	-0	-2	-0	-1	-5	-3	-1	0	2	2	3	1	-0	-2	-8	-31	
8000	1	2	0	-1	-0	-1	-4	-2	-0	0	2	2	2	-0	0	-3	-9	-32	
OVERALL	-10	-9	-10	-10	-7	-6	-6	-5	-5	-4	-2	2	3	3	5	6	1	-16	

TABLE: DIRECTIVITY INDEX (DB)

6

IDENTIFICATION:

OMEGA 1.4
TEST 75-002-059
RUN 03
09 AUG 76
PAGE 4

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
DEFLECTED FLOW

METEOROLOGY:
TEMP = 31 C
BAR PRESS = .761 M HG
REL HUMID = 55 %

FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1/3 OCTAVE																			
25	-13	-11	-12	-10	-10	-8	-9	-7	-8	-6	-2	-3	-0	5	8	6			
31.5	-12	-13	-13	-13	-13	-11	-11	-9	-9	-8	-2	-3	3	5	7	6			
40	-15	-14	-14	-14	-12	-11	-9	-9	-9	-9	-0	-2	5	6	7	3			
50	-17	-16	-15	-13	-12	-13	-11	-10	-10	-7	-2	-2	3	7	7	2			
63	-16	-16	-16	-13	-14	-13	-13	-11	-11	-10	-5	-2	3	8	7	-1			
80	-16	-17	-17	-15	-15	-15	-13	-13	-12	-11	-3	-2	5	8	5	-4			
100	-18	-18	-16	-15	-15	-15	-14	-13	-13	-10	-3	0	5	8	5	-7			
125	-19	-19	-17	-16	-15	-15	-14	-13	-12	-11	-3	0	6	7	6	-10			
160	-20	-19	-17	-17	-16	-16	-15	-14	-13	-12	-3	0	7	7	5	-12			
200	-19	-17	-16	-16	-16	-14	-15	-13	-11	-10	-1	2	6	6	6	-13			
250	-19	-18	-15	-16	-14	-15	-15	-12	-10	-8	-0	2	6	6	6	-17			
315	-19	-20	-18	-16	-14	-14	-13	-12	-10	-9	1	2	4	6	7	-18			
400	-19	-20	-17	-15	-14	-13	-12	-11	-10	-9	1	3	4	6	7	-15			
500	-19	-16	-15	-14	-13	-12	-12	-9	-6	-5	3	4	4	5	4	-16			
630	-18	-17	-16	-14	-12	-12	-10	-8	-8	-6	3	3	5	6	4	-17			
800	-20	-18	-16	-14	-11	-12	-10	-9	-6	-4	4	3	4	5	3	-16			
1000	-18	-17	-16	-14	-12	-12	-9	-7	-6	-5	4	3	4	5	3	-16			
1250	-20	-16	-16	-14	-11	-11	-8	-7	-5	-4	4	4	4	5	3	-15			
1600	-19	-17	-16	-15	-12	-12	-8	-7	-6	-4	5	3	4	5	2	-16			
2000	-20	-17	-16	-14	-11	-11	-8	-6	-7	-3	4	3	4	5	1	-15			
2500	-20	-16	-15	-14	-11	-12	-9	-5	-6	-4	5	3	3	6	1	-16			
3150	-19	-17	-15	-14	-12	-12	-8	-5	-5	-3	4	3	4	5	2	-16			
4000	-18	-17	-16	-14	-12	-11	-9	-5	-5	-4	4	3	4	5	1	-15			
5000	-19	-18	-16	-15	-11	-11	-9	-4	-5	-3	4	3	4	5	2	-15			
6300	-20	-18	-17	-15	-12	-12	-9	-5	-5	-3	4	3	4	6	1	-16			
8000	-21	-19	-18	-16	-13	-13	-10	-5	-6	-4	4	4	4	5	2	-16			
10000	-23	-21	-19	-17	-15	-14	-11	-6	-7	-5	4	3	4	5	2	-18			
OCTAVE																			
31.5	-13	-13	-14	-13	-12	-10	-10	-9	-9	-8	-1	-2	4	5	7	4			
63	-16	-17	-16	-14	-14	-14	-13	-12	-11	-10	-3	-2	5	8	6	-2			
125	-19	-19	-17	-16	-16	-16	-14	-14	-12	-11	-3	0	6	7	5	-10			
250	-19	-19	-17	-16	-15	-15	-14	-12	-11	-9	0	2	5	6	6	-16			
500	-18	-18	-16	-15	-13	-13	-11	-9	-8	-7	2	3	4	6	5	-16			
1000	-19	-17	-16	-14	-11	-11	-9	-8	-6	-4	4	3	4	5	3	-16			
2000	-20	-17	-16	-15	-11	-12	-8	-6	-6	-4	5	3	4	5	2	-16			
4000	-19	-17	-15	-14	-12	-12	-9	-5	-5	-3	4	3	4	5	1	-15			
8000	-21	-19	-18	-16	-13	-13	-10	-5	-6	-4	4	4	4	6	2	-16			
OVERALL	-19	-18	-16	-15	-13	-13	-12	-10	-9	-7	2	2	5	6	5	-11			

FIGURE 5: OVERALL SOUND PRESSURE LEVEL (OASPL) EQUAL LEVEL CONTOURS (DB)

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 01
02 AUG 76
PAGE 13

POINT	DB
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90

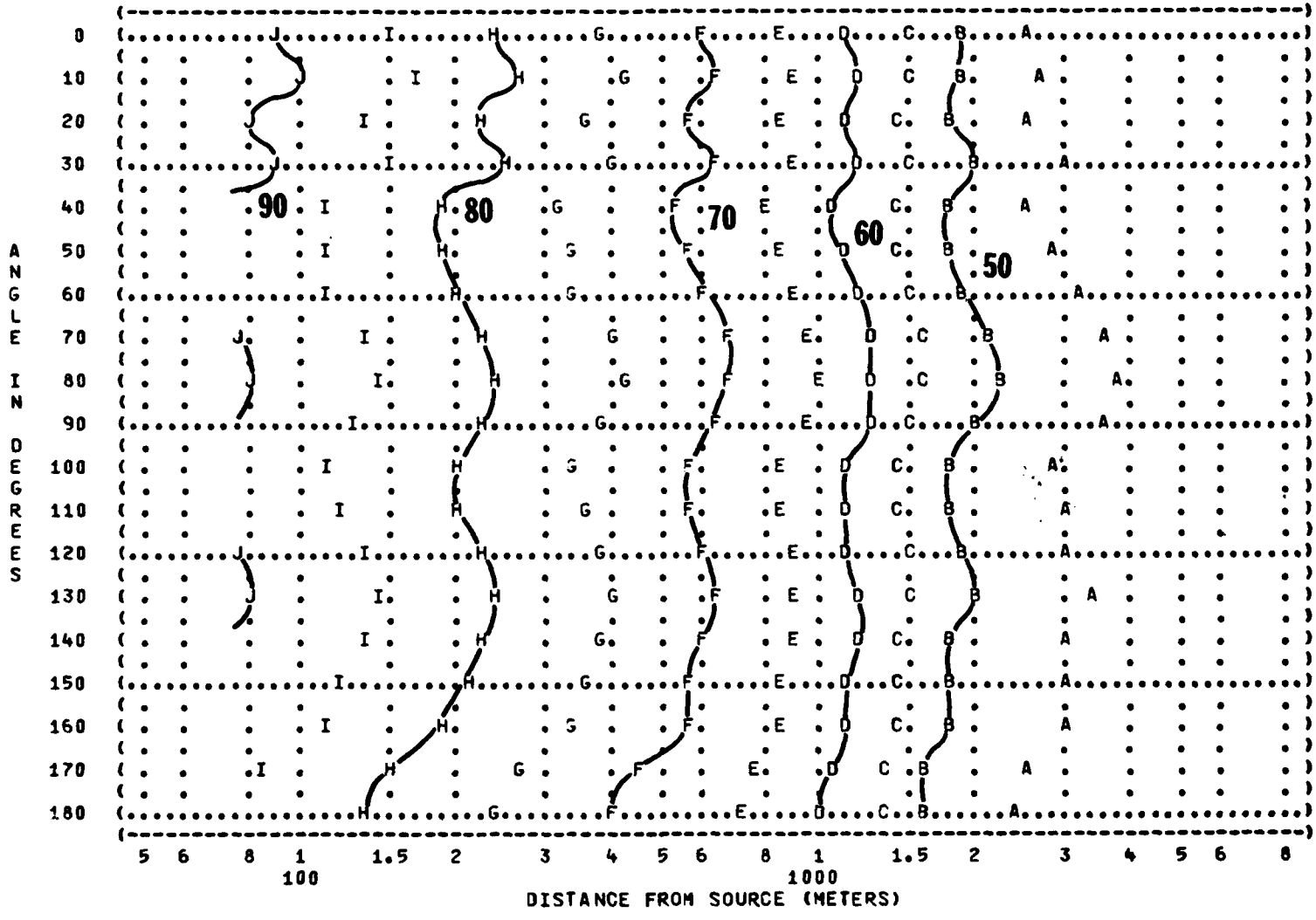


FIGURE 5 OVERALL SOUND PRESSURE LEVEL (OASPL) EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 02
02 AUG 76
PAGE 13

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	DB
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90
K	95
L	100
M	105
N	110
O	115

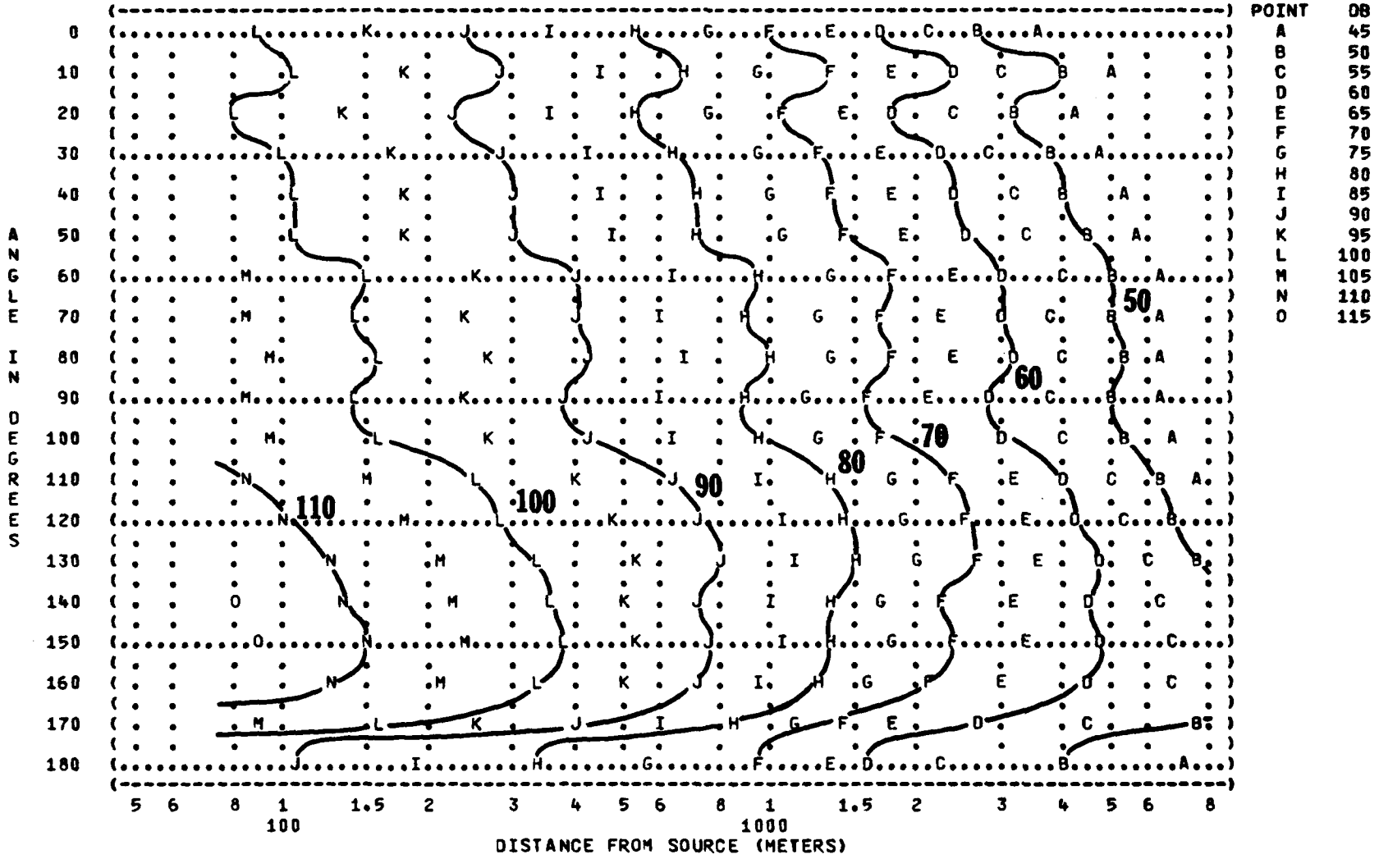


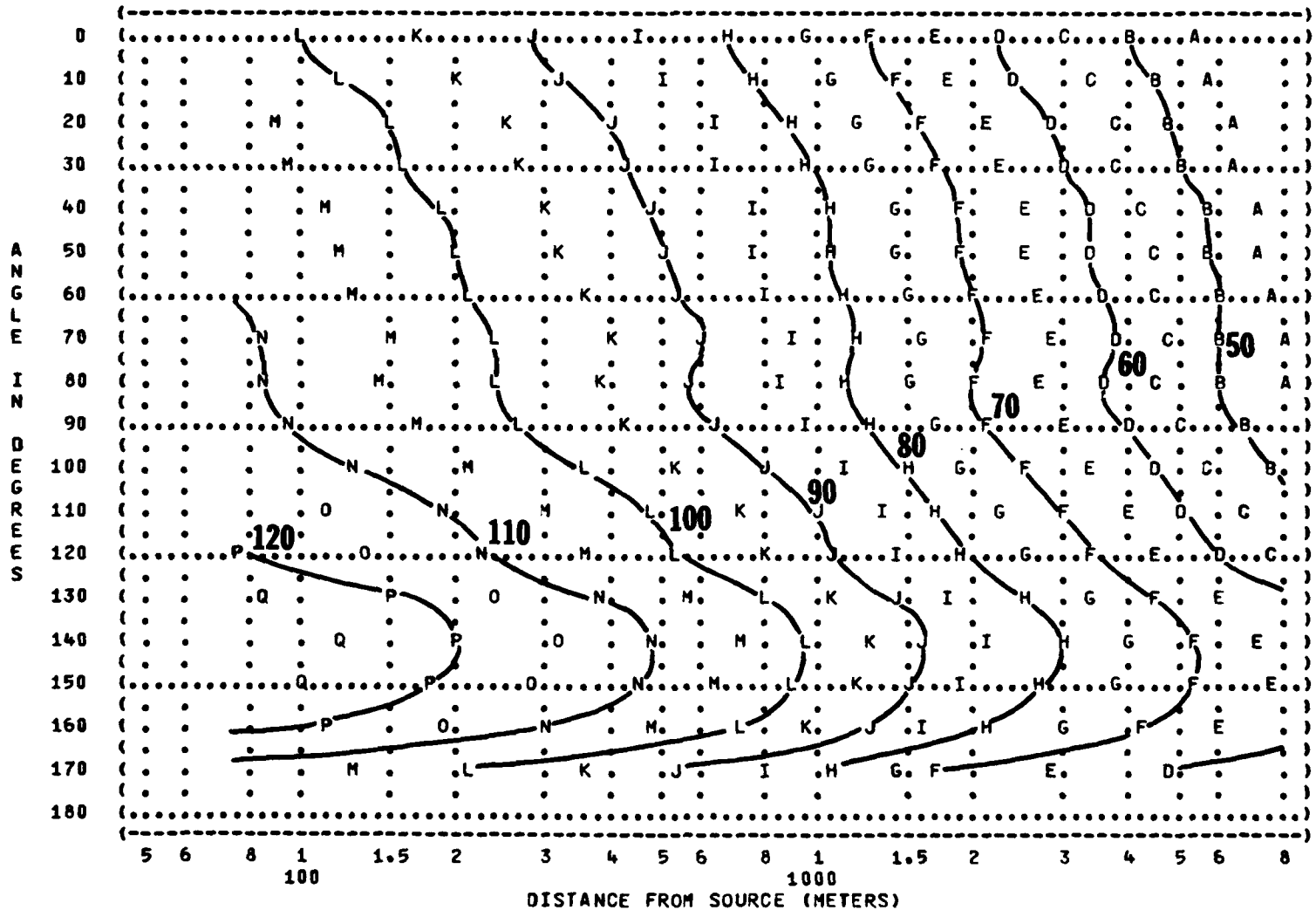
FIGURE 5 OVERALL SOUND PRESSURE LEVEL (OASPL) EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 03
02 AUG 76
PAGE 13

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DB
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90
K	95
L	100
M	105
N	110
O	115
P	120
Q	125

FIGURE: 5 OVERALL SOUND PRESSURE LEVEL (OASPL) EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 04
02 AUG 76
PAGE 13

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	DB
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90

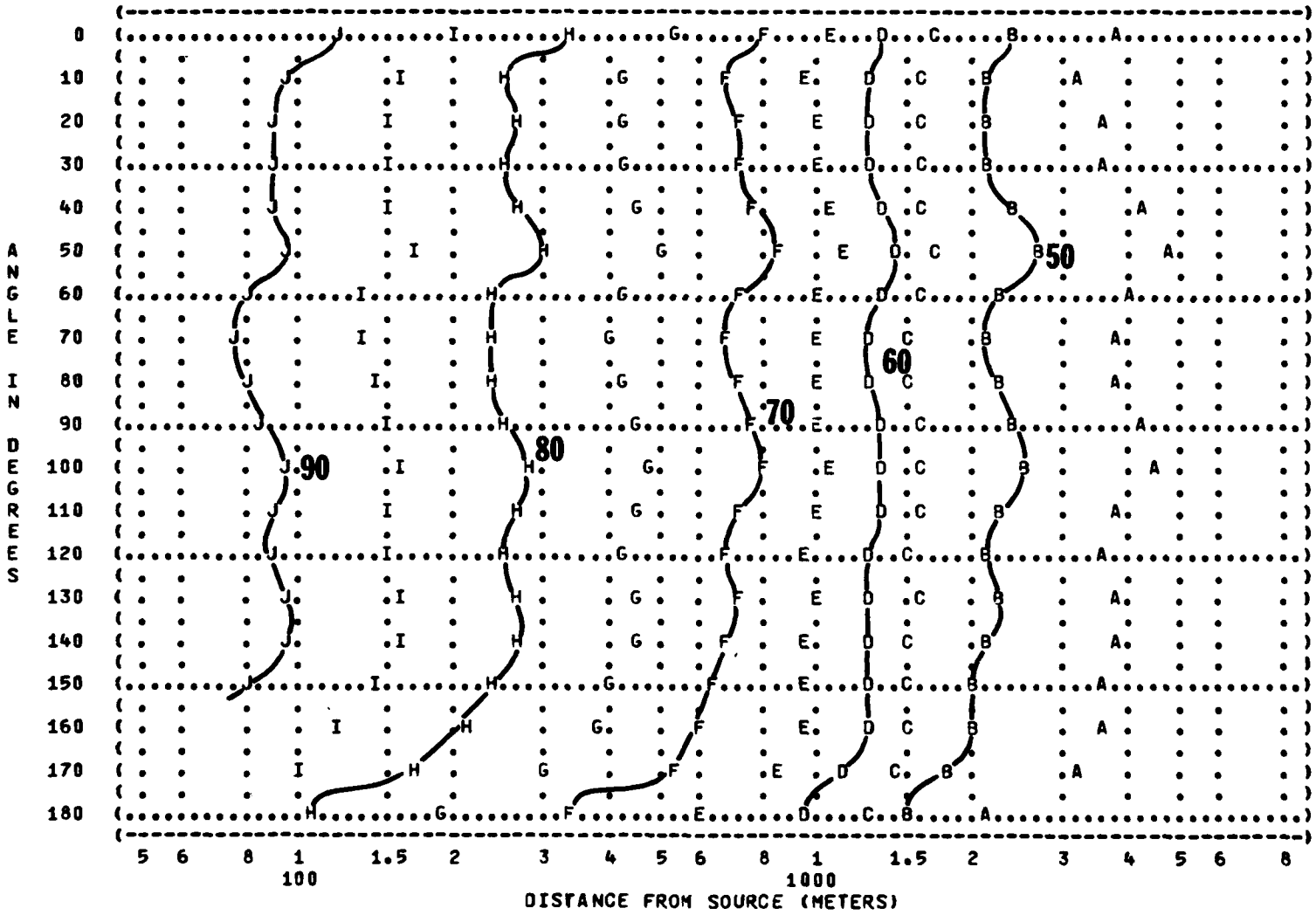


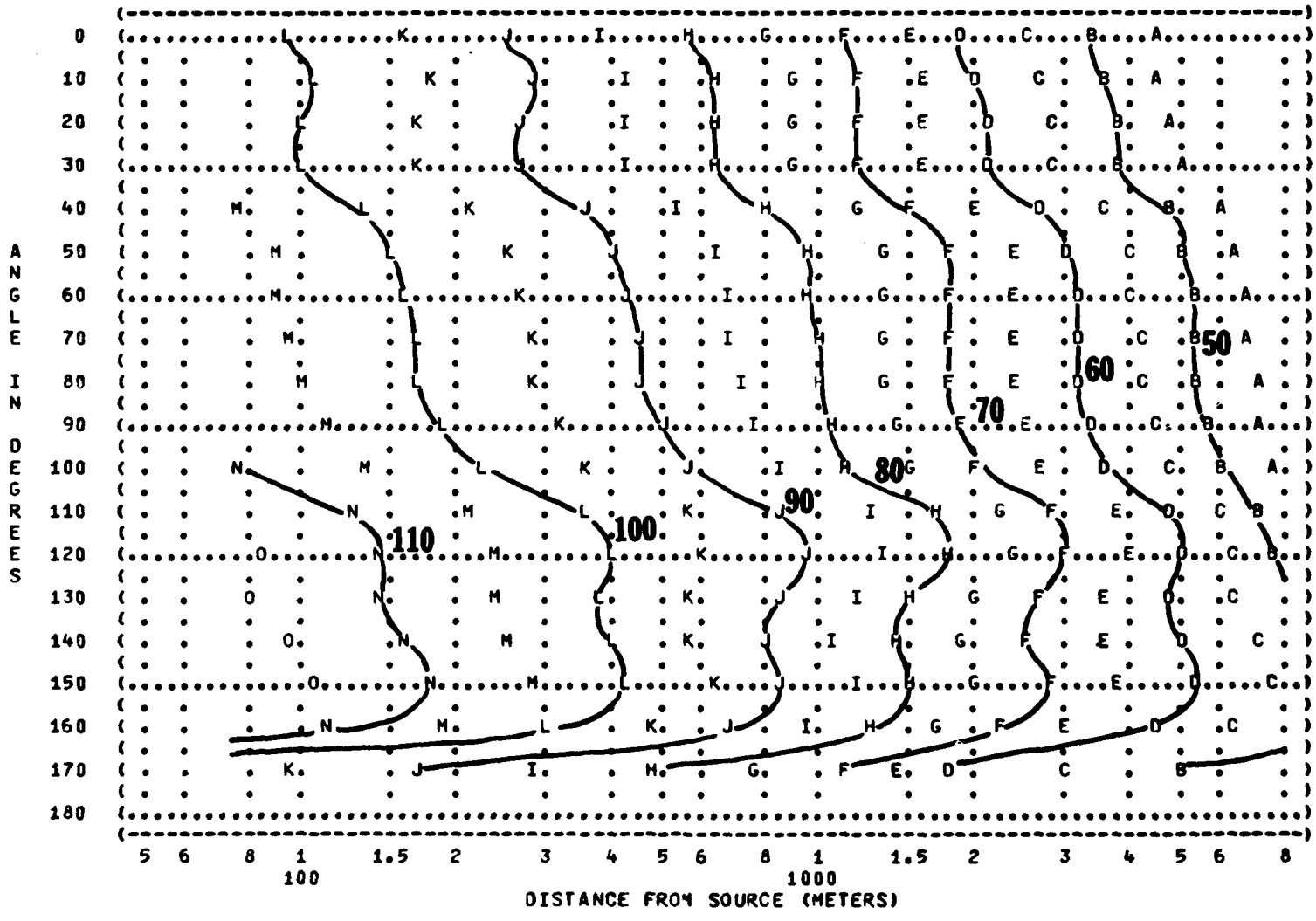
FIGURE: 5 OVERALL SOUND PRESSURE LEVEL (OASPL) EQUAL LEVEL CONTOURS (DB)

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 05
02 AUG 76
PAGE 13



POINT	DB
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90
K	95
L	100
M	105
N	110
O	115

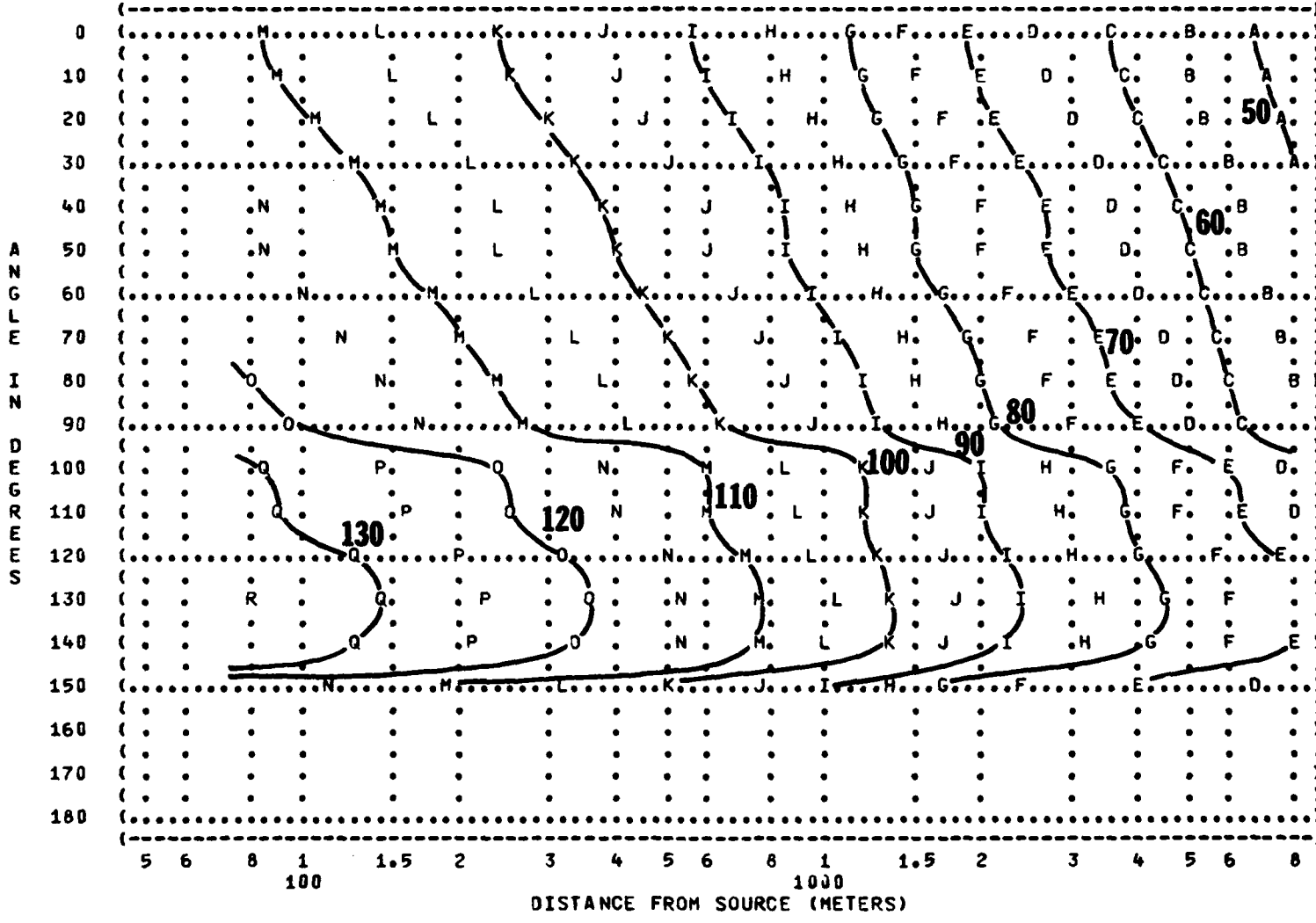
FIGURE 5: OVERALL SOUND PRESSURE LEVEL (OASPL) EQUAL LEVEL CONTOURS (DB)

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
DEFLECTED FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-059
RUN 03
09 AUG 76
PAGE 13



POINT	DB
A	50
B	55
C	60
D	65
E	70
F	75
G	80
H	85
I	90
J	95
K	100
L	105
M	110
N	115
O	120
P	125
Q	130
R	135

FIGURE 6: C-WEIGHTED OVERALL SOUND LEVEL (OASLC) EQUAL LEVEL CONTOURS (DBC)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 01
02 AUG 76
PAGE 14

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

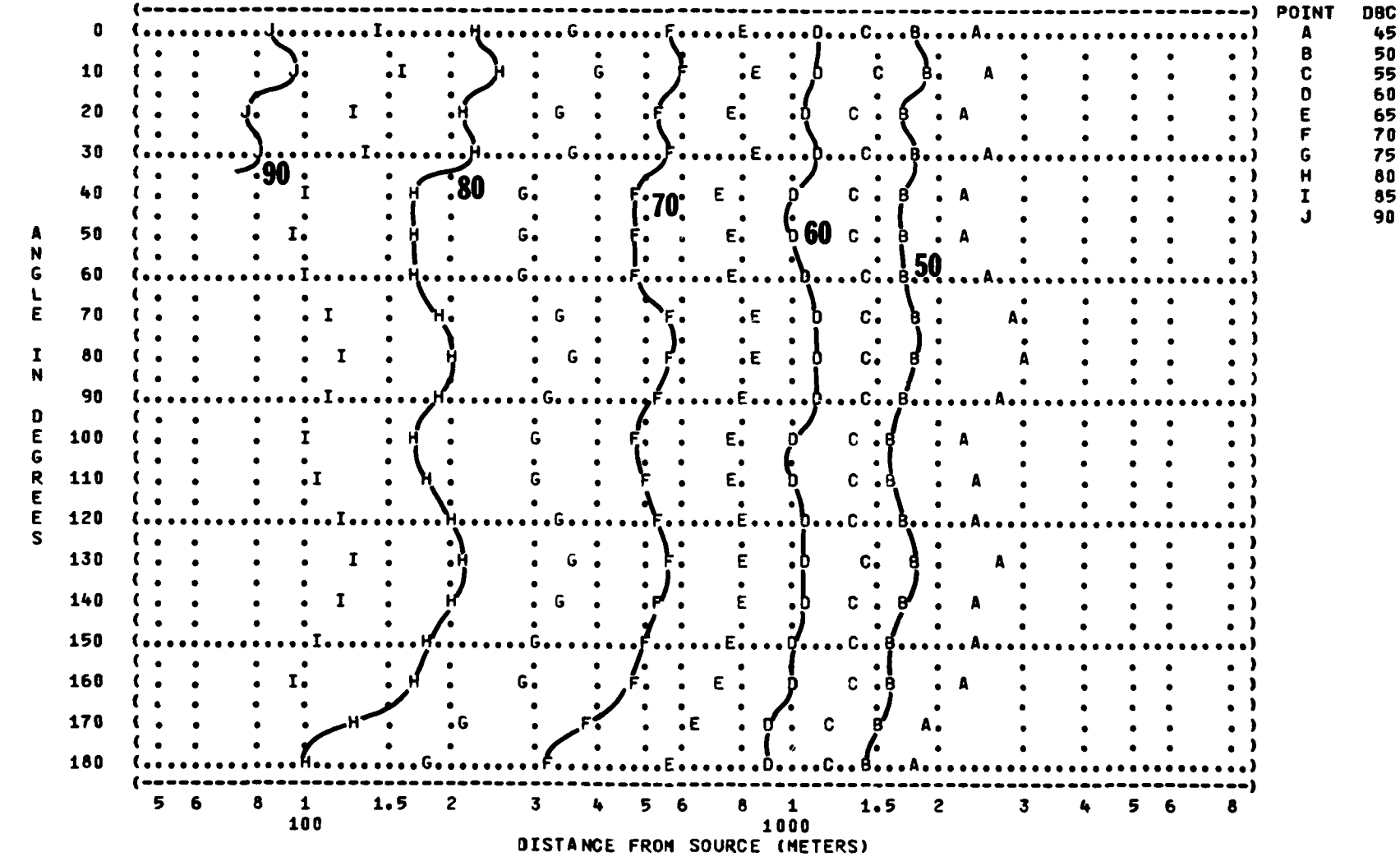


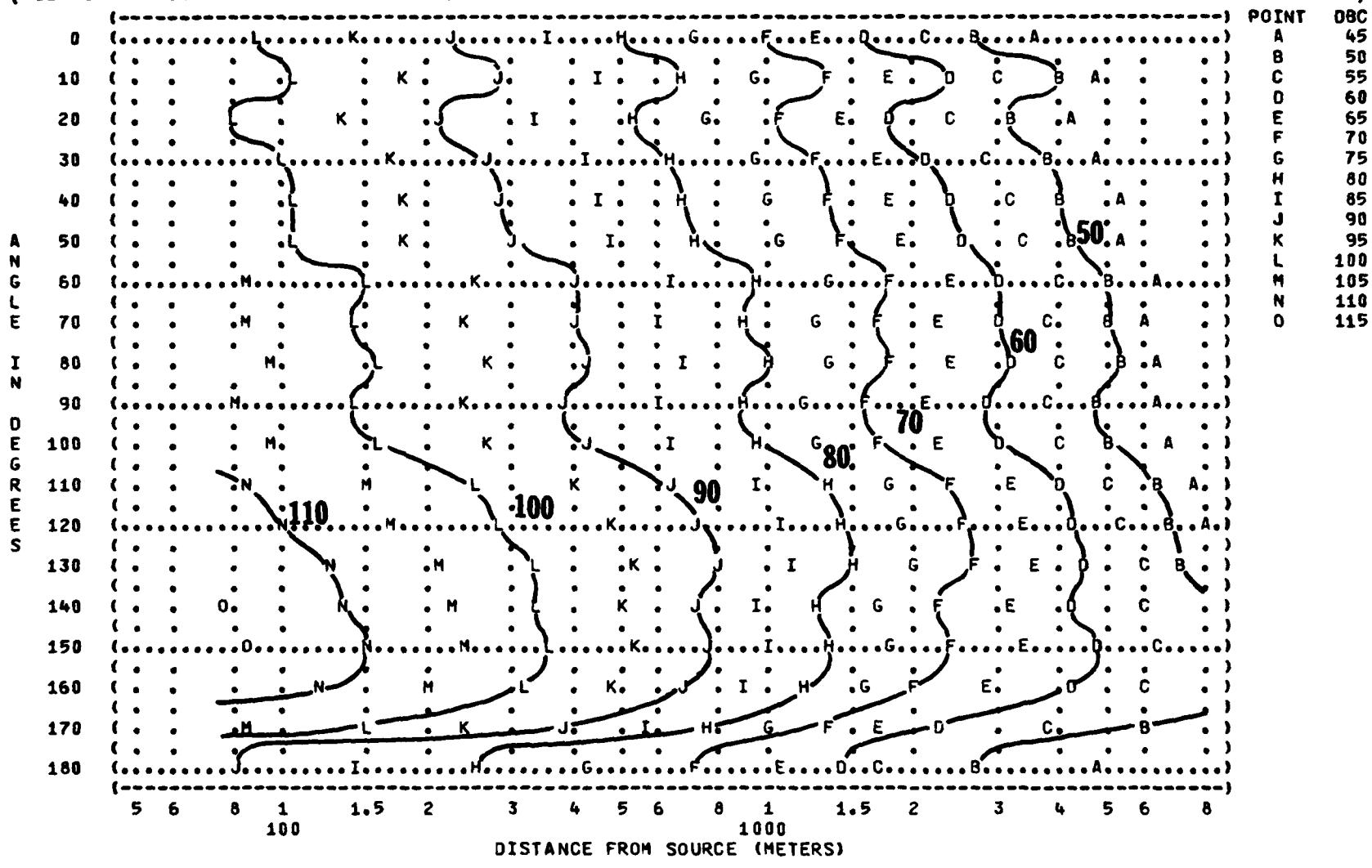
FIGURE 6 C-WEIGHTED OVERALL SOUND LEVEL (OASLC) EQUAL LEVEL CONTOURS (OBC)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 02
02 AUG 76
PAGE 14

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	OBC
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90
K	95
L	100
M	105
N	110
O	115

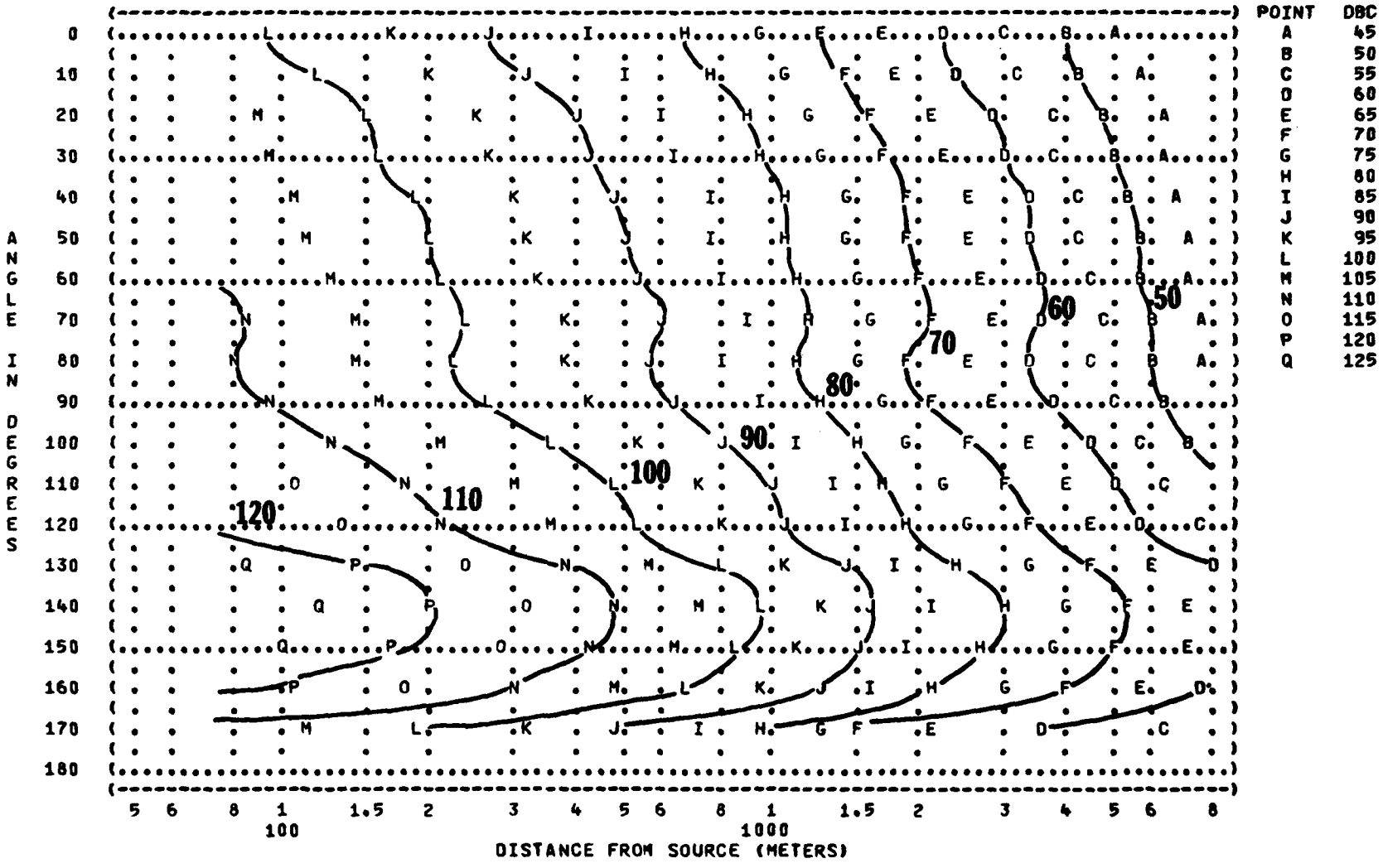
FIGURE: 6 C-WEIGHTED OVERALL SOUND LEVEL (OASLC) EQUAL LEVEL CONTOURS (DBC)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 03
02 AUG 76
PAGE 14

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DBC
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90
K	95
L	100
M	105
N	110
O	115
P	120
Q	125

FIGURE: 6 C-WEIGHTED OVERALL SOUND LEVEL (OASLC) EQUAL LEVEL CONTOURS (DBC)

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 04
02 AUG 76
PAGE 14

POINT	DBC
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90

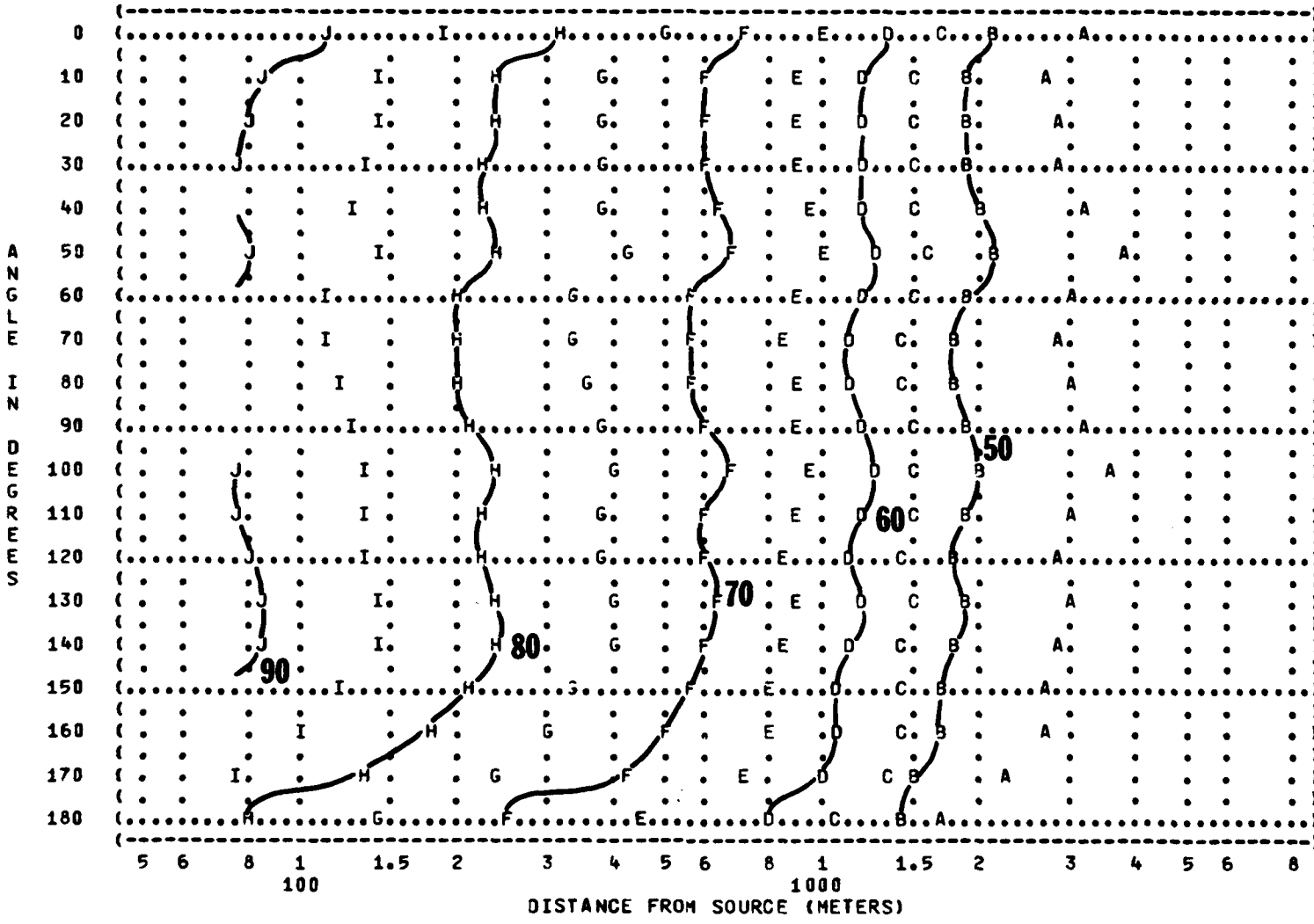


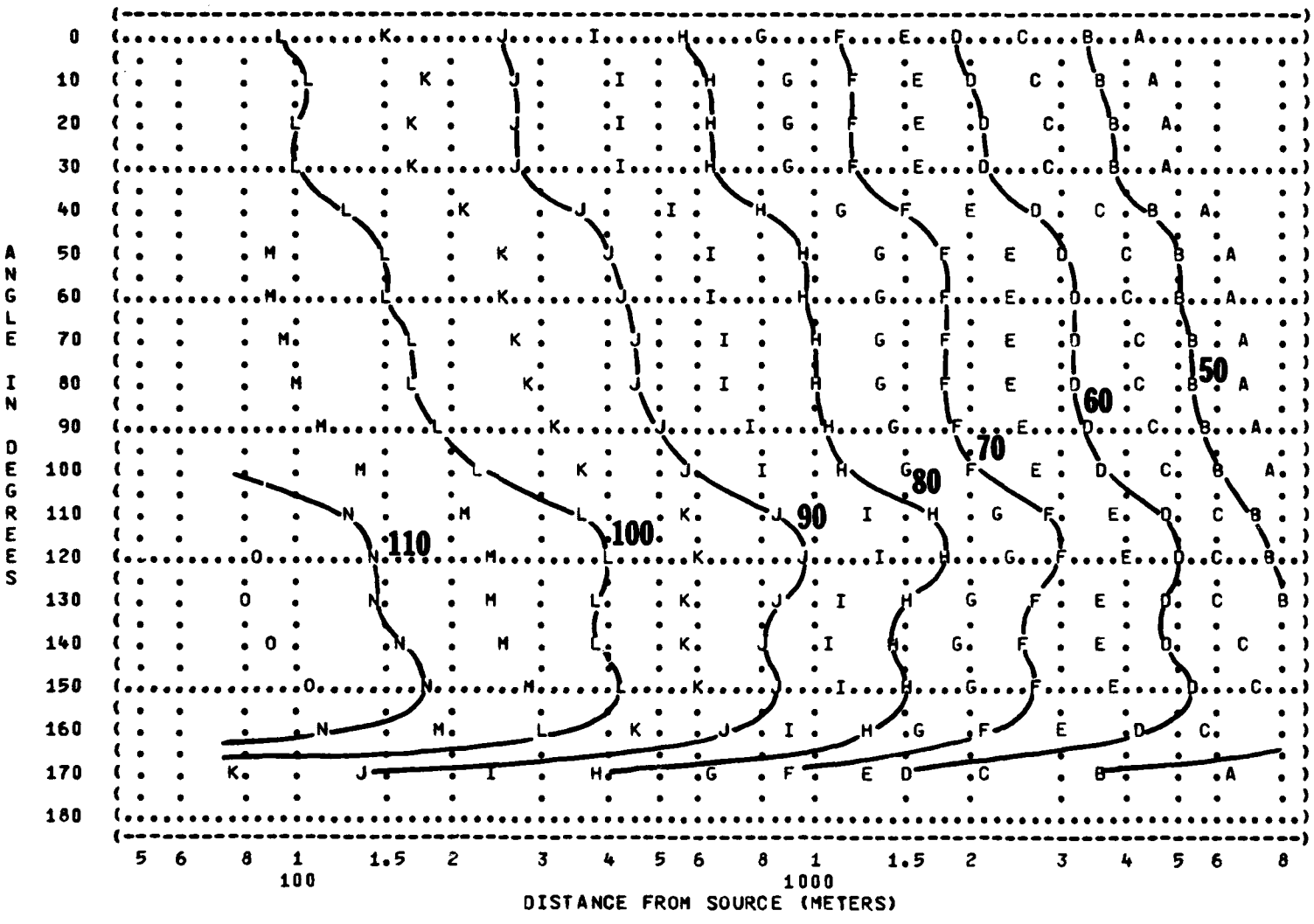
FIGURE: 6 C-WEIGHTED OVERALL SOUND LEVEL (OASLC) EQUAL LEVEL CONTOURS (DBC)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 05
02 AUG 76
PAGE 14

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DBC
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90
K	95
L	100
M	105
N	110
O	115

FIGURE: 6 C-WEIGHTED OVERALL SOUND LEVEL (OASLC) EQUAL LEVEL CONTOURS (DBC)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-059
RUN 03
09 AUG 76
PAGE 14

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
DEFLECTED FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	DBC
A	50
B	55
C	60
D	65
E	70
F	75
G	80
H	85
I	90
J	95
K	100
L	105
M	110
N	115
O	120
P	125
Q	130
R	135

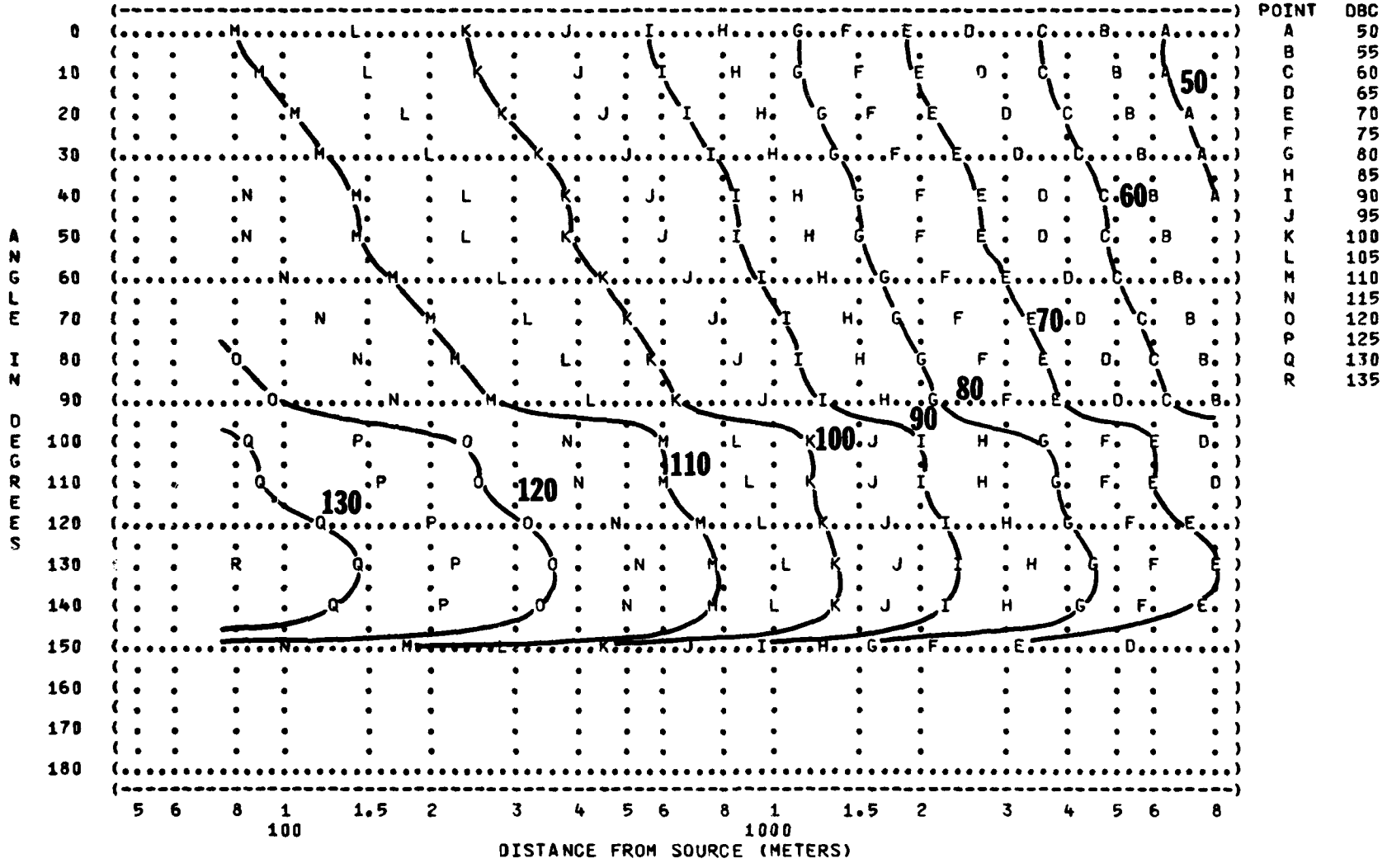


FIGURE 7 A-WEIGHTED OVERALL SOUND LEVEL (OASLA) EQUAL LEVEL CONTOURS (DBA)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 01
02 AUG 76
PAGE 15

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	DBA
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90

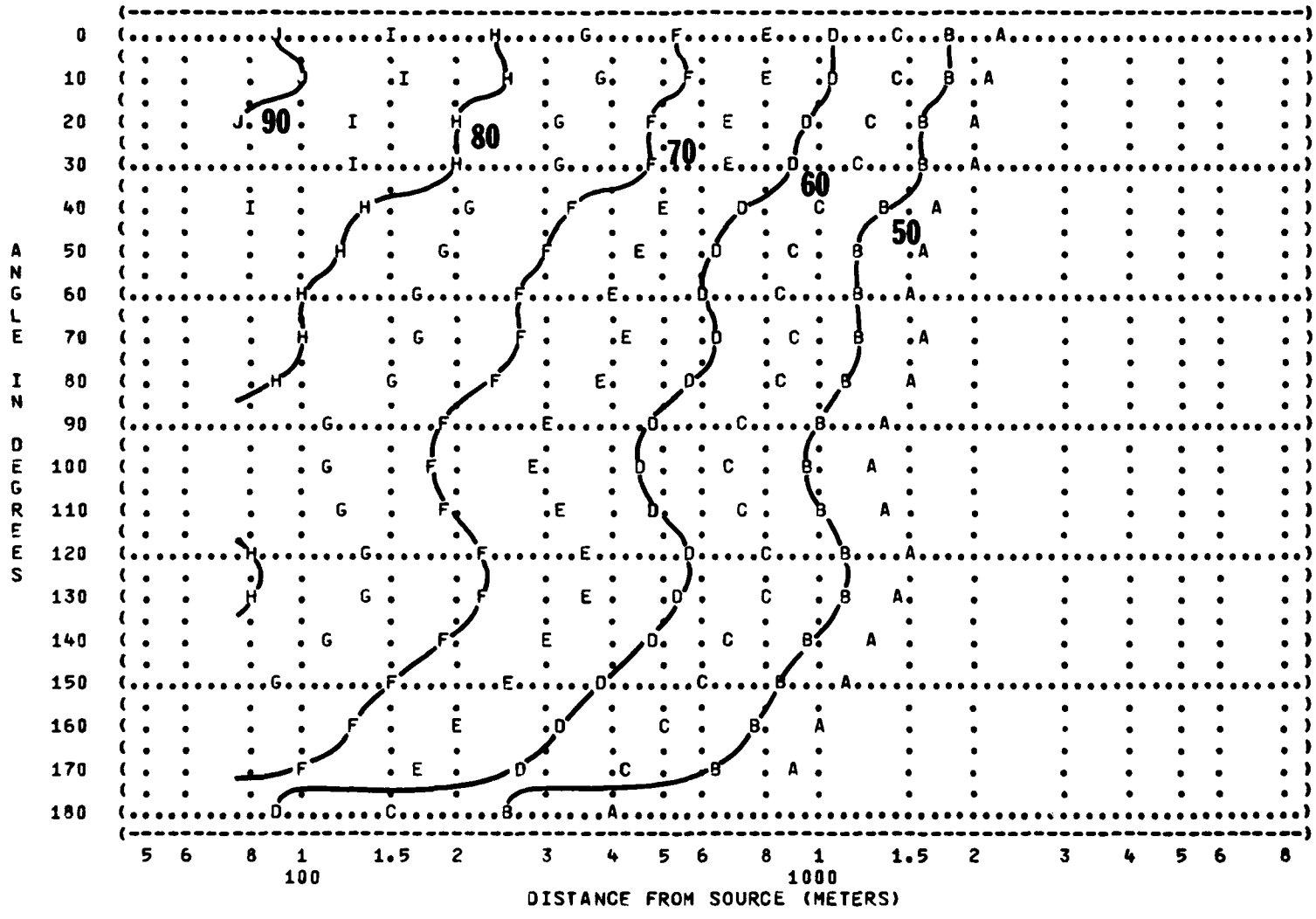


FIGURE 7: A-WEIGHTED OVERALL SOUND LEVEL (OASLA) EQUAL LEVEL CONTOURS (DBA)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 02
02 AUG 76
PAGE 15

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	DBA
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90
K	95
L	100
M	105
N	110

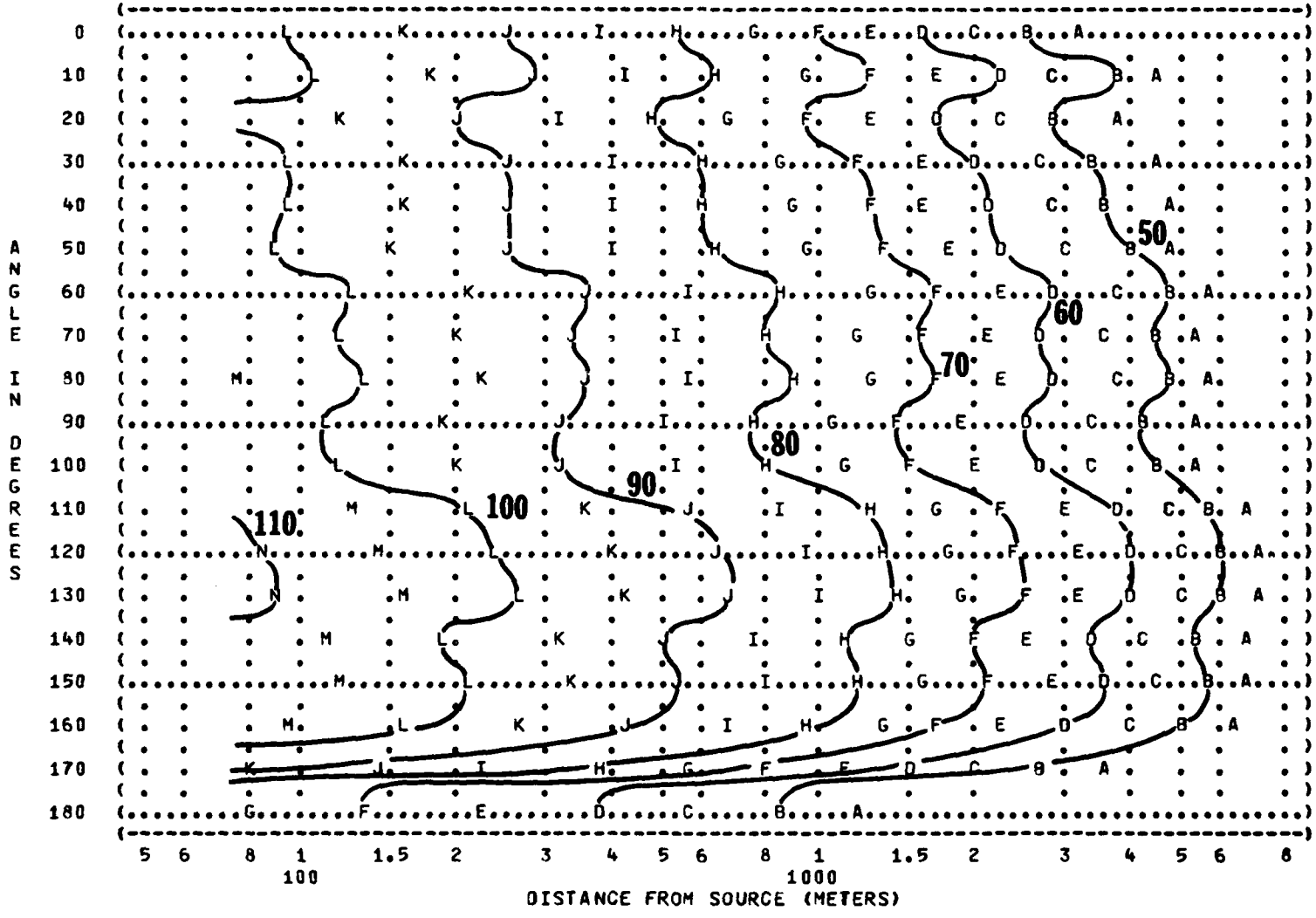


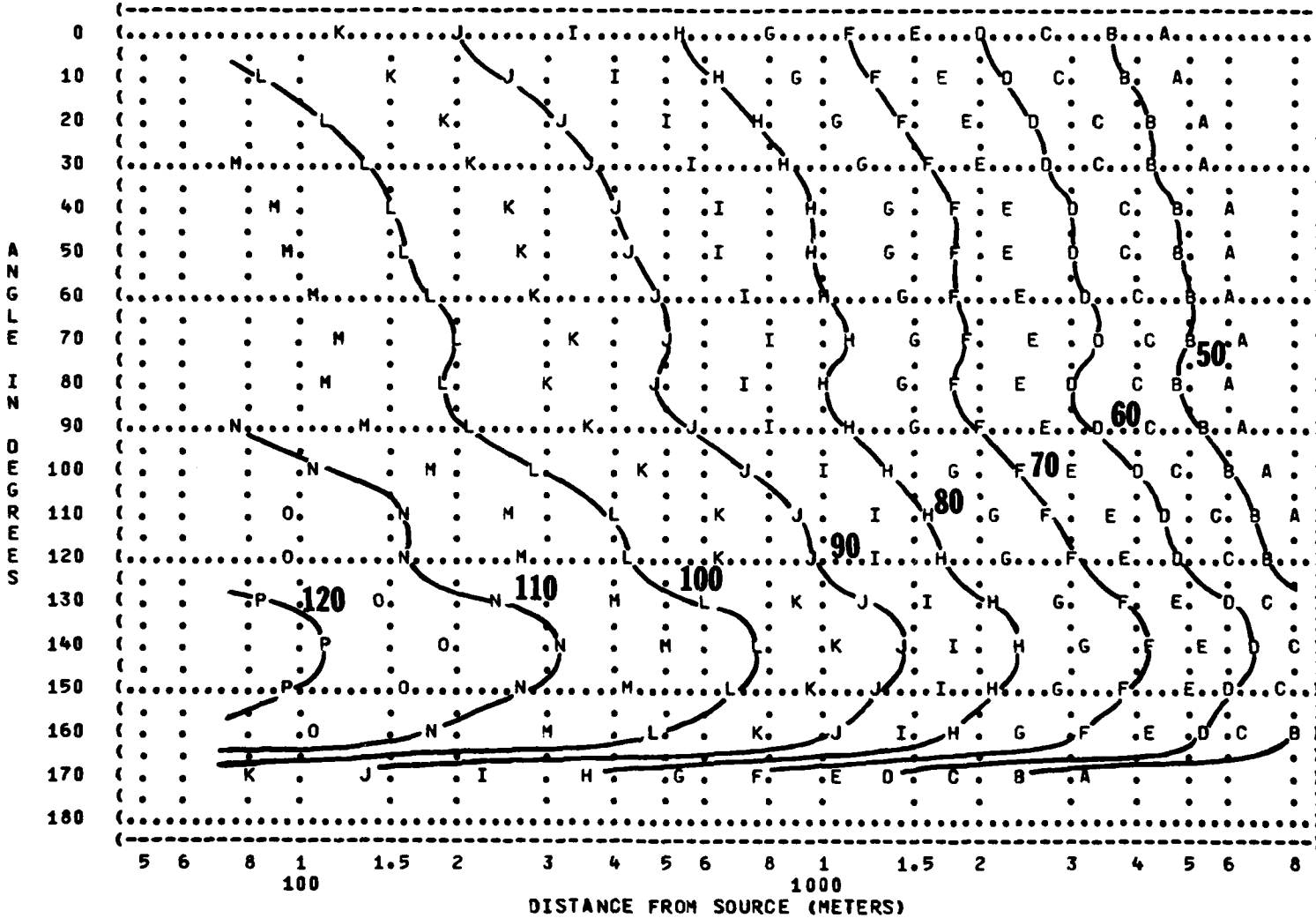
FIGURE 7 A-WEIGHTED OVERALL SOUND LEVEL (OASLA) EQUAL LEVEL CONTOURS (DBA)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 03
02 AUG 76
PAGE 15

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DBA
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90
K	95
L	100
M	105
N	110
O	115
P	120

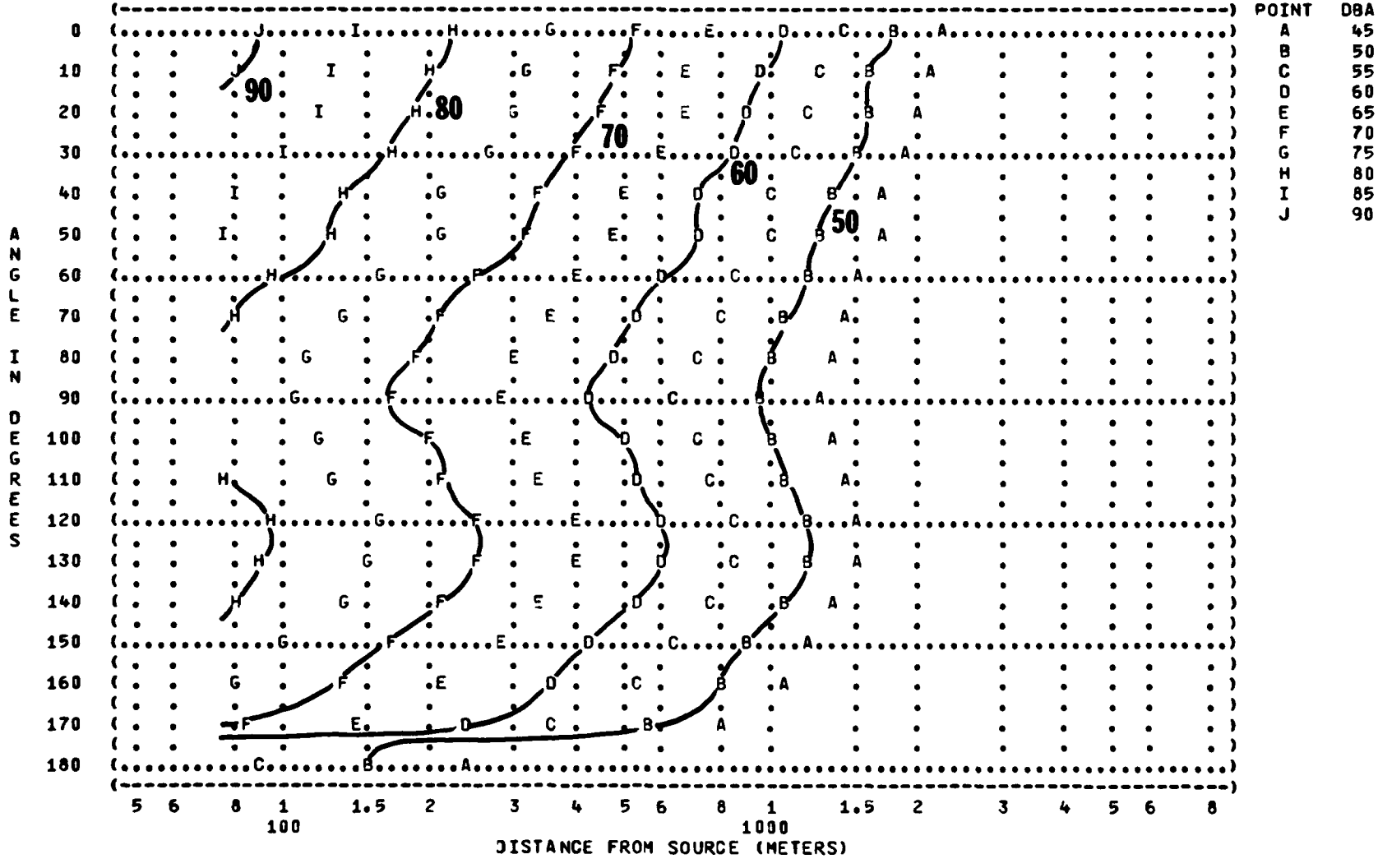
FIGURE 7: A-WEIGHTED OVERALL SOUND LEVEL (OASLA) EQUAL LEVEL CONTOURS (DBA)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 04
02 AUG 76
PAGE 15

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DBA
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90

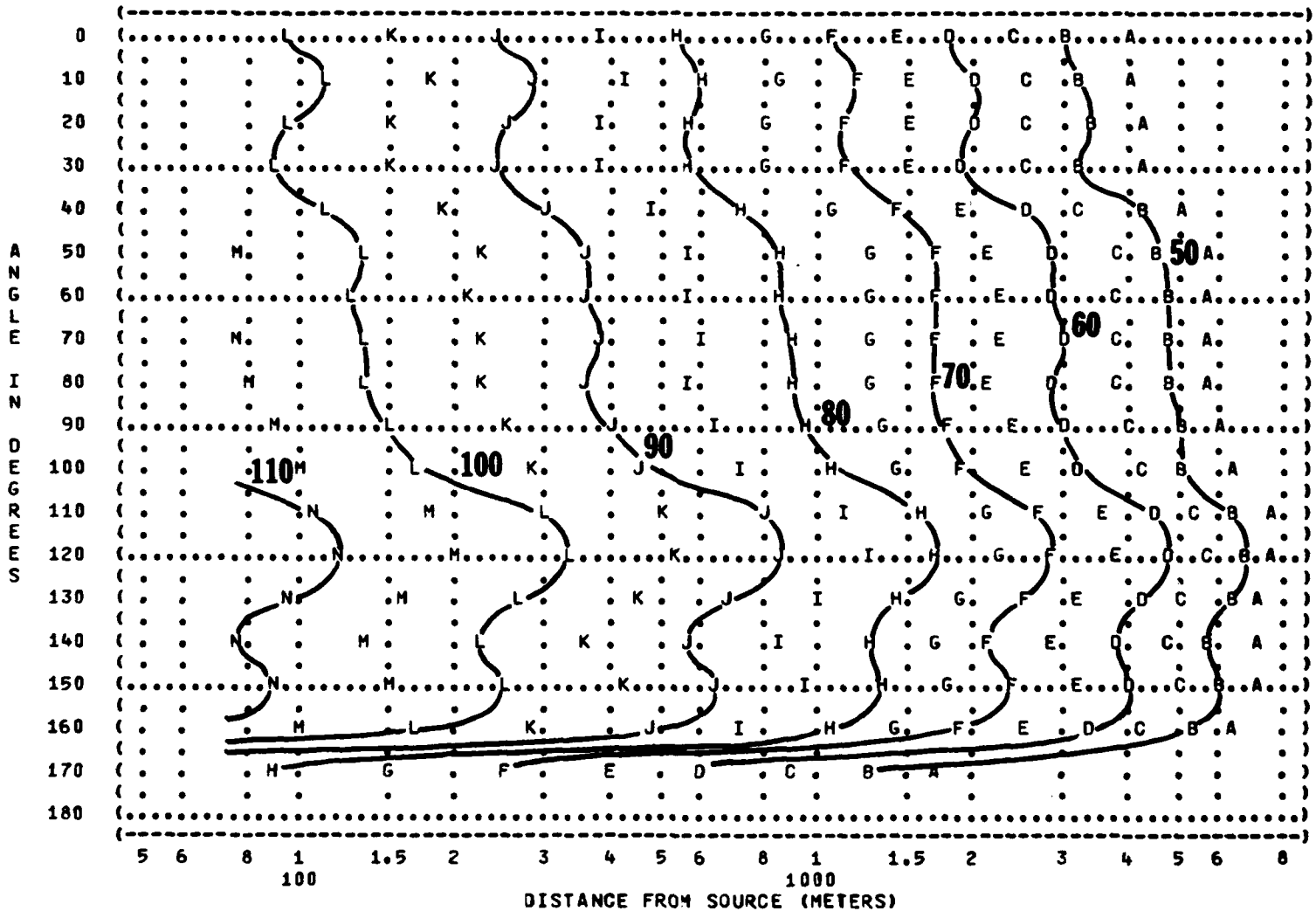
FIGURE 7: A-WEIGHTED OVERALL SOUND LEVEL (OASLA) EQUAL LEVEL CONTOURS (DBA)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 05
02 AUG 76
PAGE 15

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DBA
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90
K	95
L	100
M	105
N	110

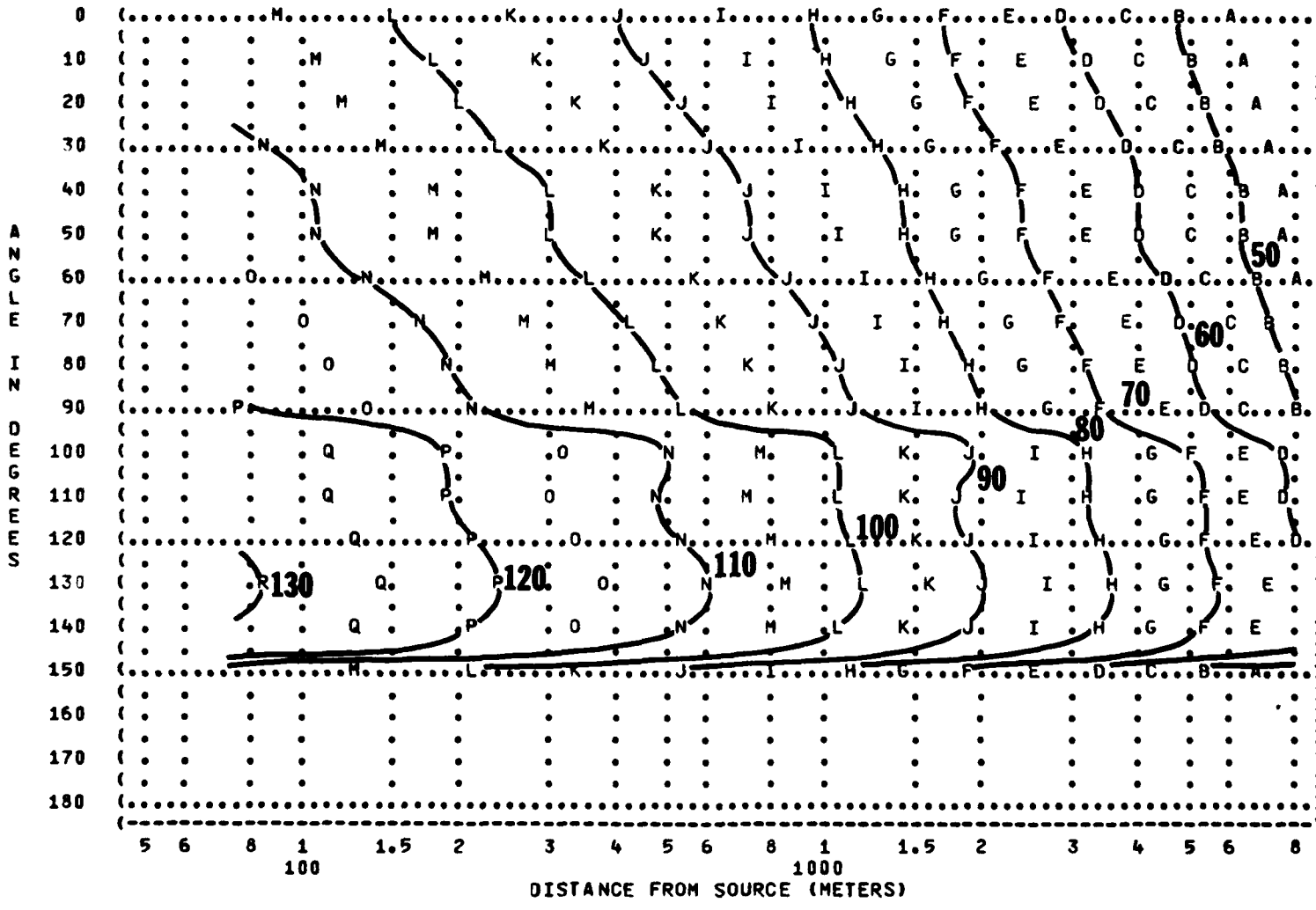
FIGURE 7 A-WEIGHTED OVERALL SOUND LEVEL (OASLA) EQUAL LEVEL CONTOURS (DBA)

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
DEFLECTED FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-059
RUN 03
09 AUG 76
PAGE 15



POINT	DBA
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90
K	95
L	100
M	105
N	110
O	115
P	120
Q	125
R	130

FIGURE 8: PERCEIVED NOISE LEVEL WITH SMOOTH TONE CORRECTION (PNLT) EQUAL LEVEL CONTOURS (PNDB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 01
02 AUG 76
PAGE 16

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

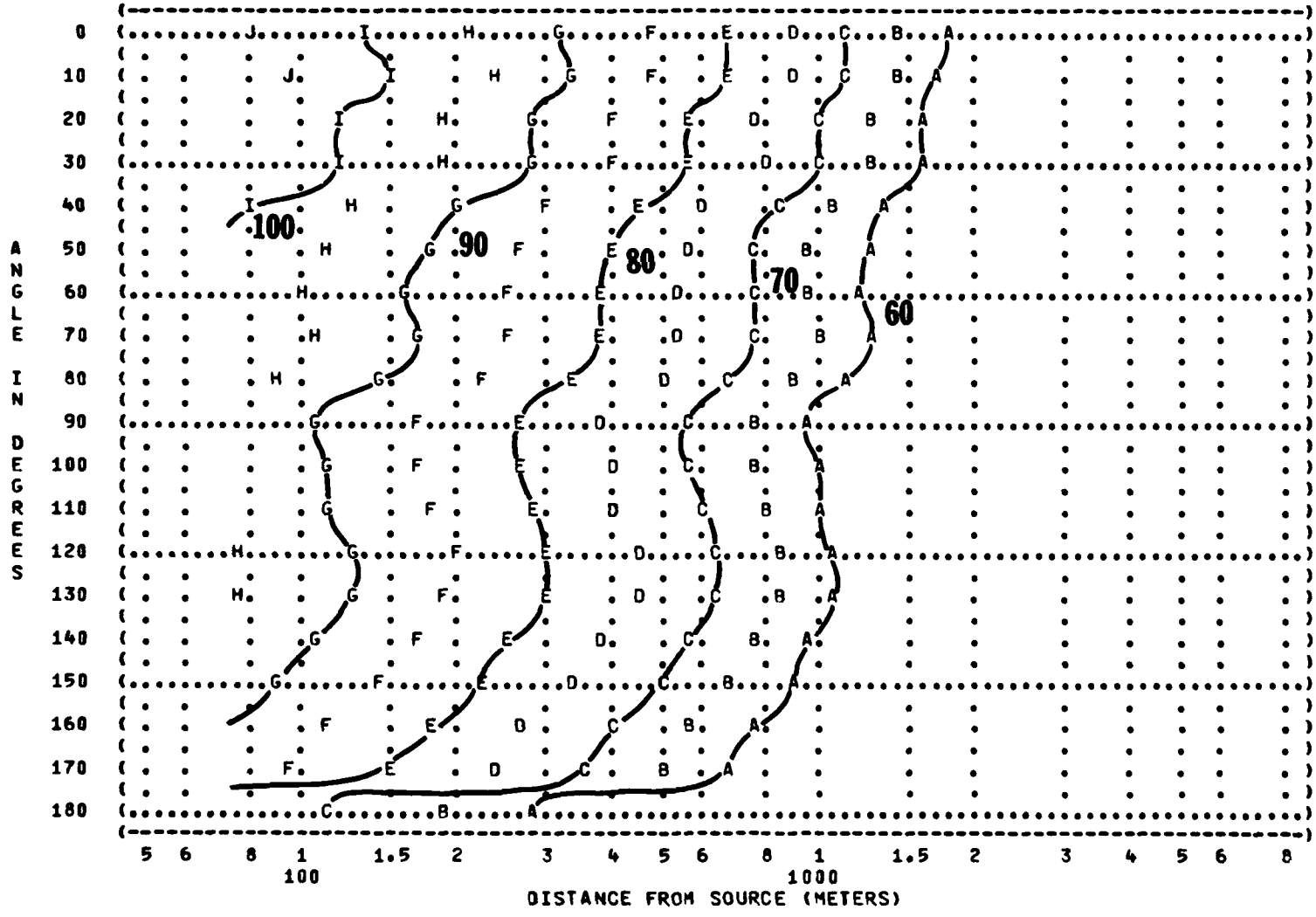


FIGURE 8 PERCEIVED NOISE LEVEL WITH SMOOTH TONE CORRECTION (PNLT) EQUAL LEVEL CONTOURS (PNDB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 02
02 AUG 76
PAGE 16

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	PNDB
A	60
B	65
C	70
D	75
E	80
F	85
G	90
H	95
I	100
J	105
K	110
L	115
M	120
N	125

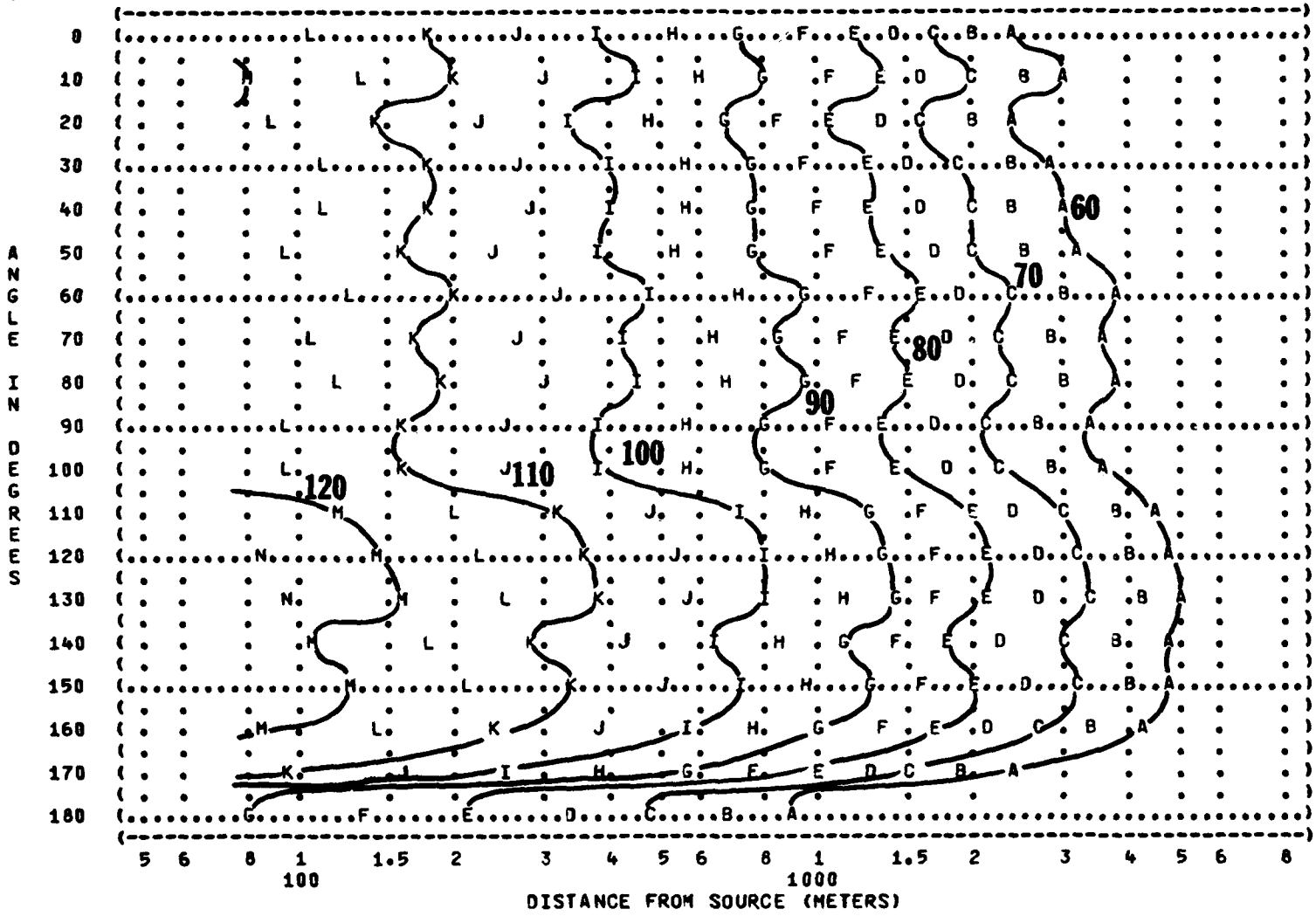


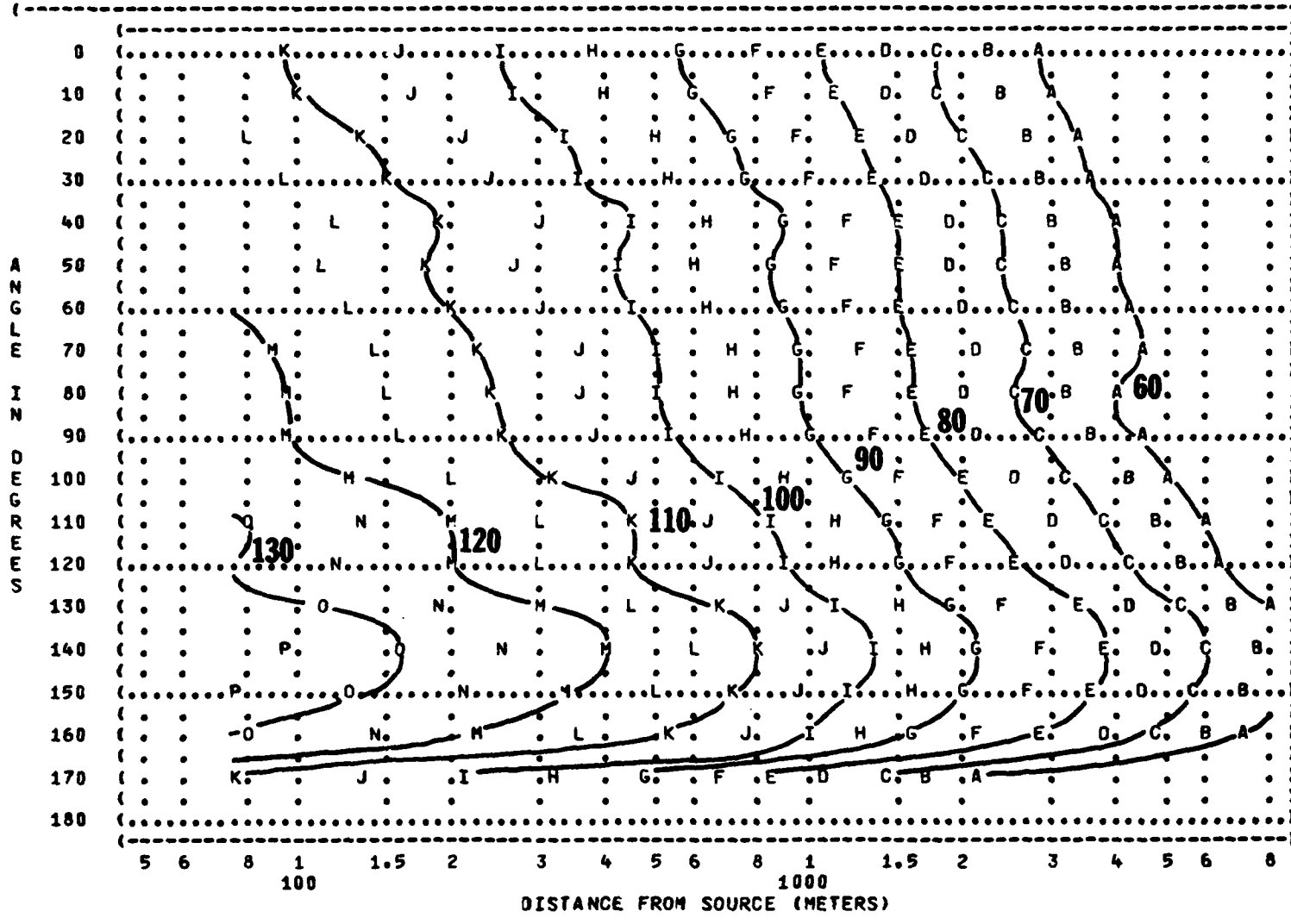
FIGURE 8 PERCEIVED NOISE LEVEL WITH SMOOTH TONE CORRECTION (PNLT)
EQUAL LEVEL CONTOURS (PNDB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 03
02 AUG 76
PAGE 16

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	PNDB
A	60
B	65
C	70
D	75
E	80
F	85
G	90
H	95
I	100
J	105
K	110
L	115
M	120
N	125
O	130
P	135

FIGURE 8: PERCEIVED NOISE LEVEL WITH SMOOTH TONE CORRECTION (PNLT)
EQUAL LEVEL CONTOURS (PNDB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 04
02 AUG 76
PAGE 16

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	PNDB
A	60
B	65
C	70
D	75
E	80
F	85
G	90
H	95
I	100
J	105

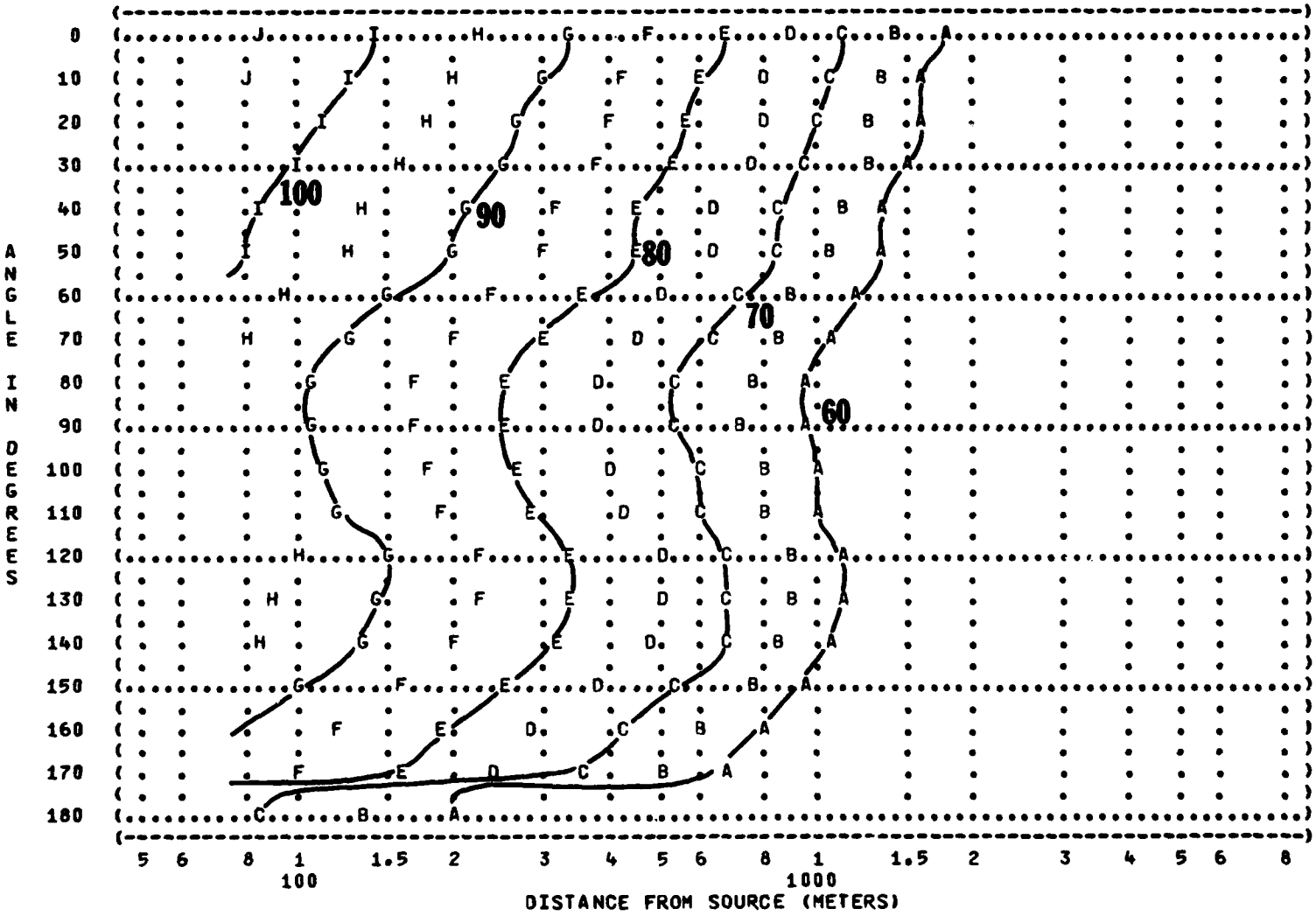


FIGURE 8 PERCEIVED NOISE LEVEL WITH SMOOTH TONE CORRECTION (PNLT)
EQUAL LEVEL CONTOURS (PNDB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 05
02 AUG 76
PAGE 16

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	PNDB
A	60
B	65
C	70
D	75
E	80
F	85
G	90
H	95
I	100
J	105
K	110
L	115
M	120
N	125

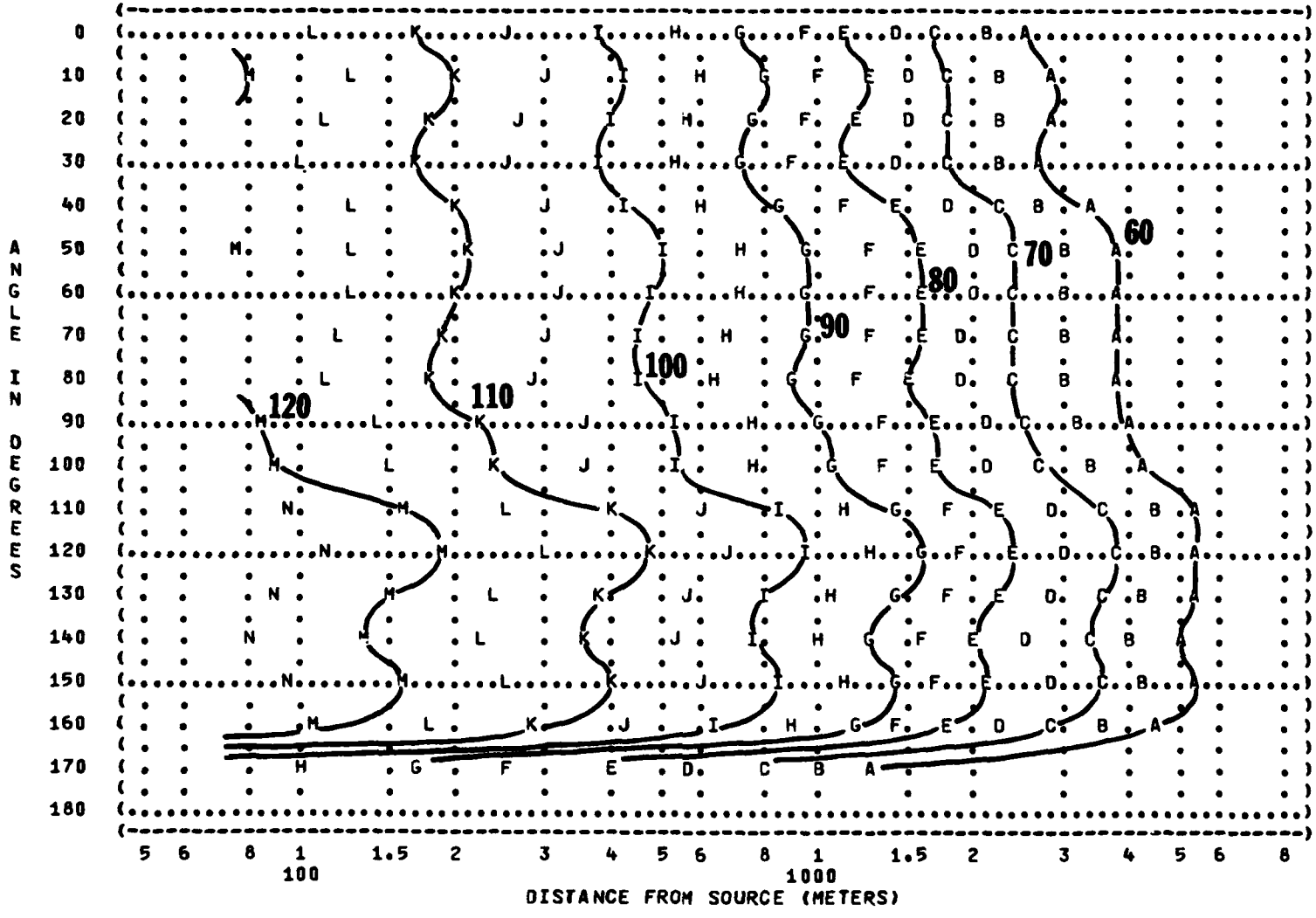


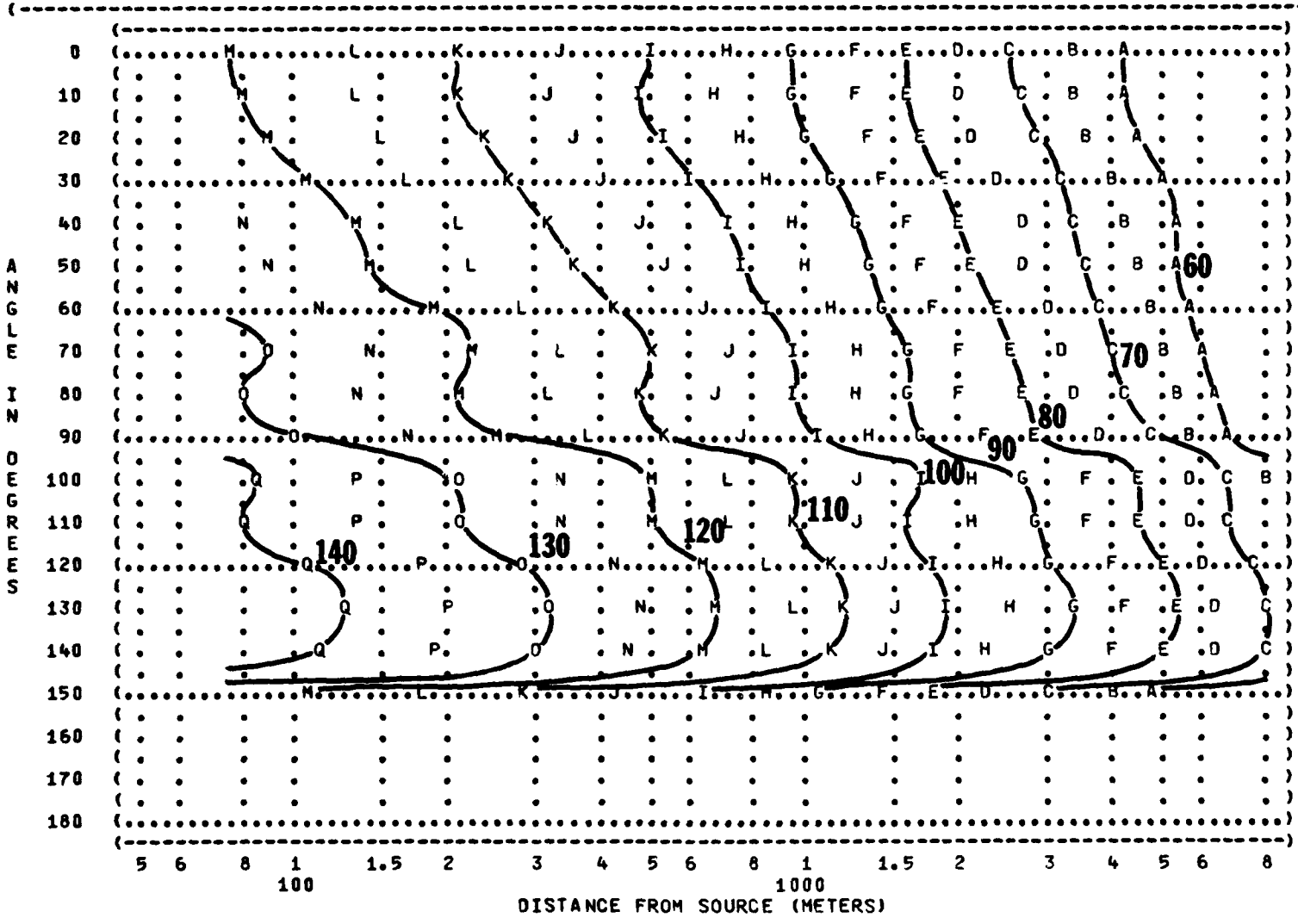
FIGURE 8 PERCEIVED NOISE LEVEL WITH SMOOTH TONE CORRECTION (PNLT) EQUAL LEVEL CONTOURS (PNDB)

IDENTIFICATION: OMEGA 1.4 TEST 75-002-059 RUN 03 09 AUG 76 PAGE 16

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
DEFLECTED FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	PNDB
A	60
B	65
C	70
D	75
E	80
F	85
G	90
H	95
I	100
J	105
K	110
L	115
M	120
N	125
O	130
P	135
Q	140

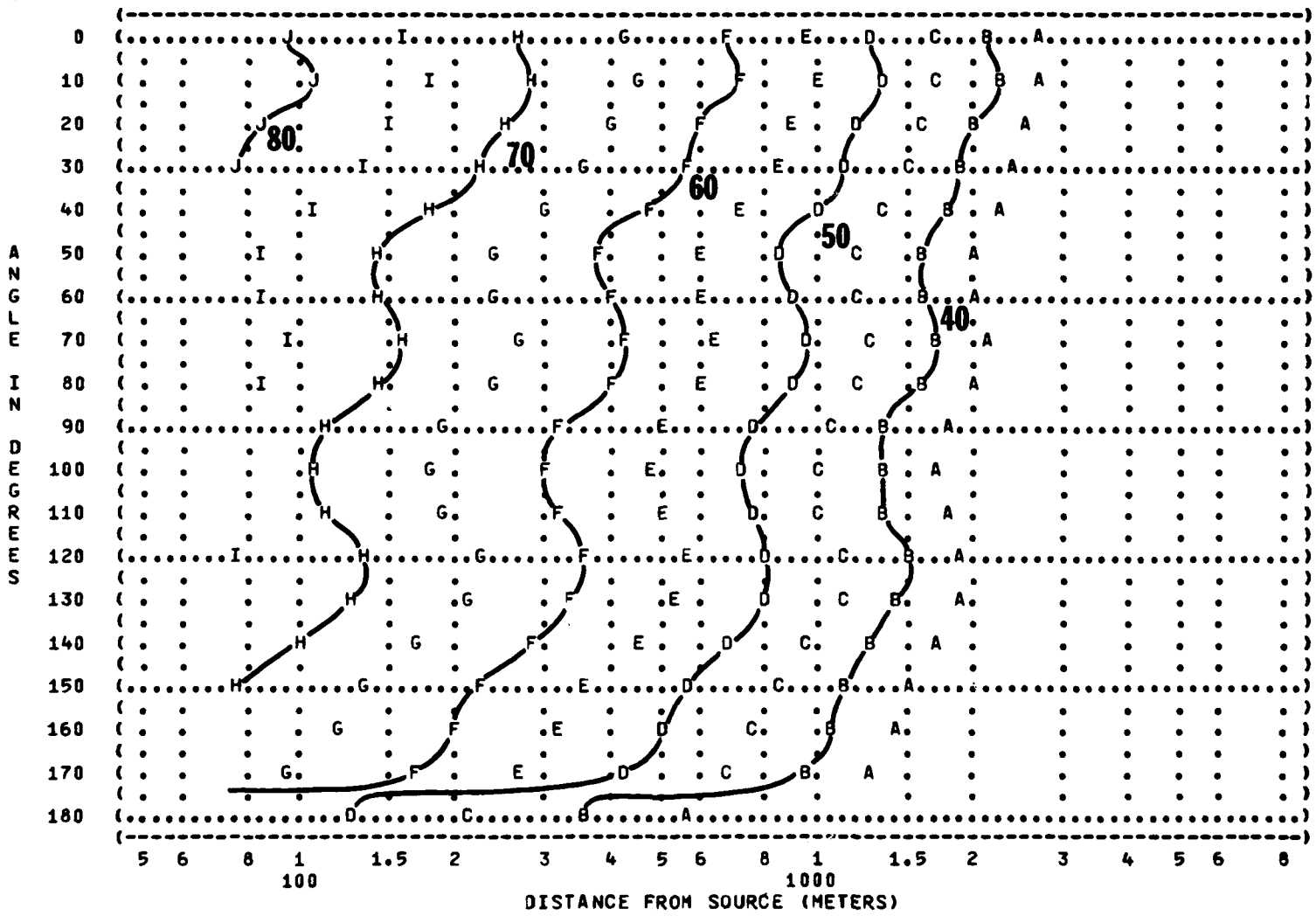
FIGURE: 9 PREFERRED SPEECH INTERFERENCE LEVEL (PSIL) EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
ONEGA 1.4
TEST 75-002-026
RUN 01
02 AUG 76
PAGE 17

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80

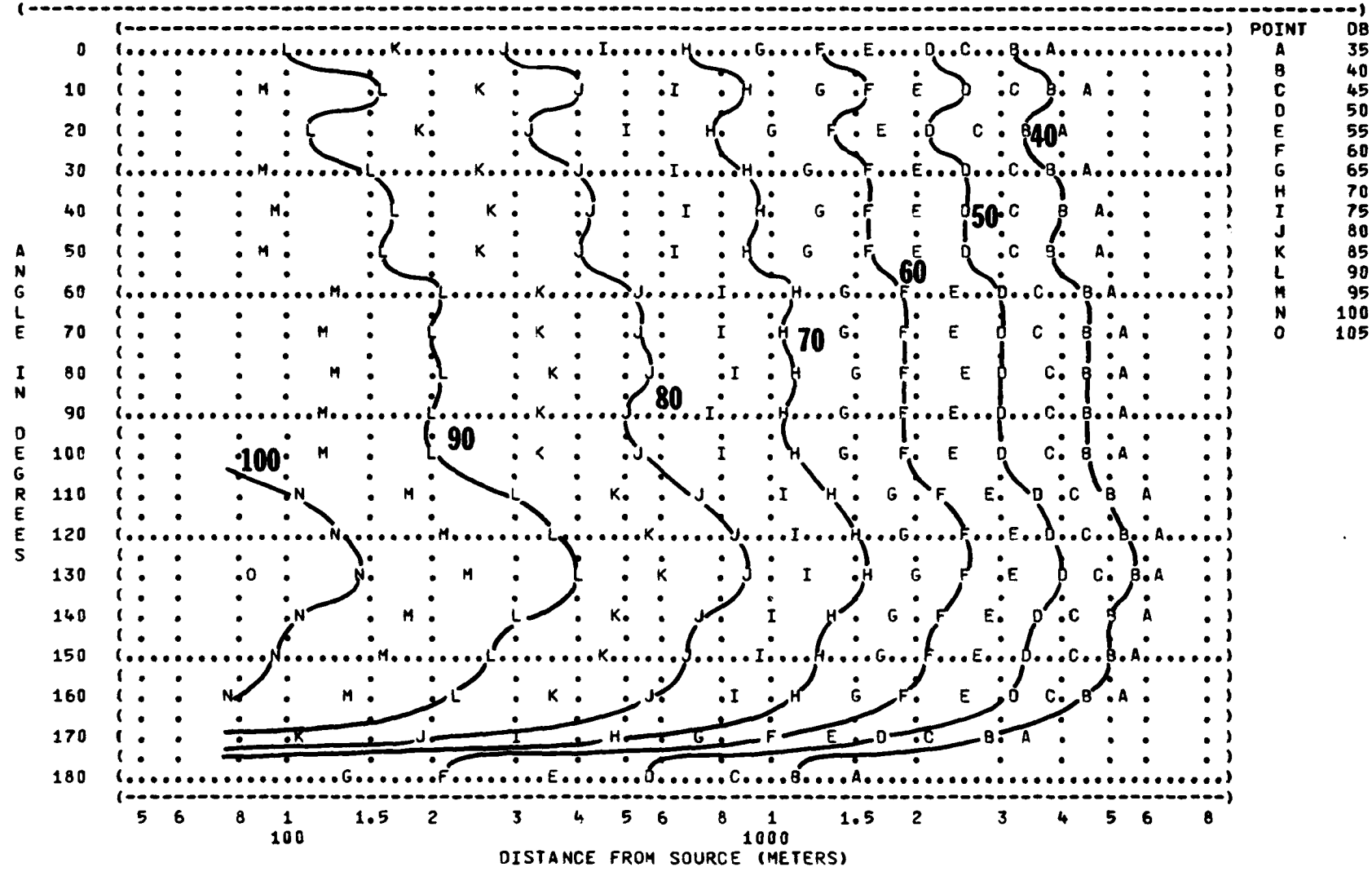
FIGURE 9 PREFERRED SPEECH INTERFERENCE LEVEL (PSIL) EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 02
02 AUG 76
PAGE 17

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105

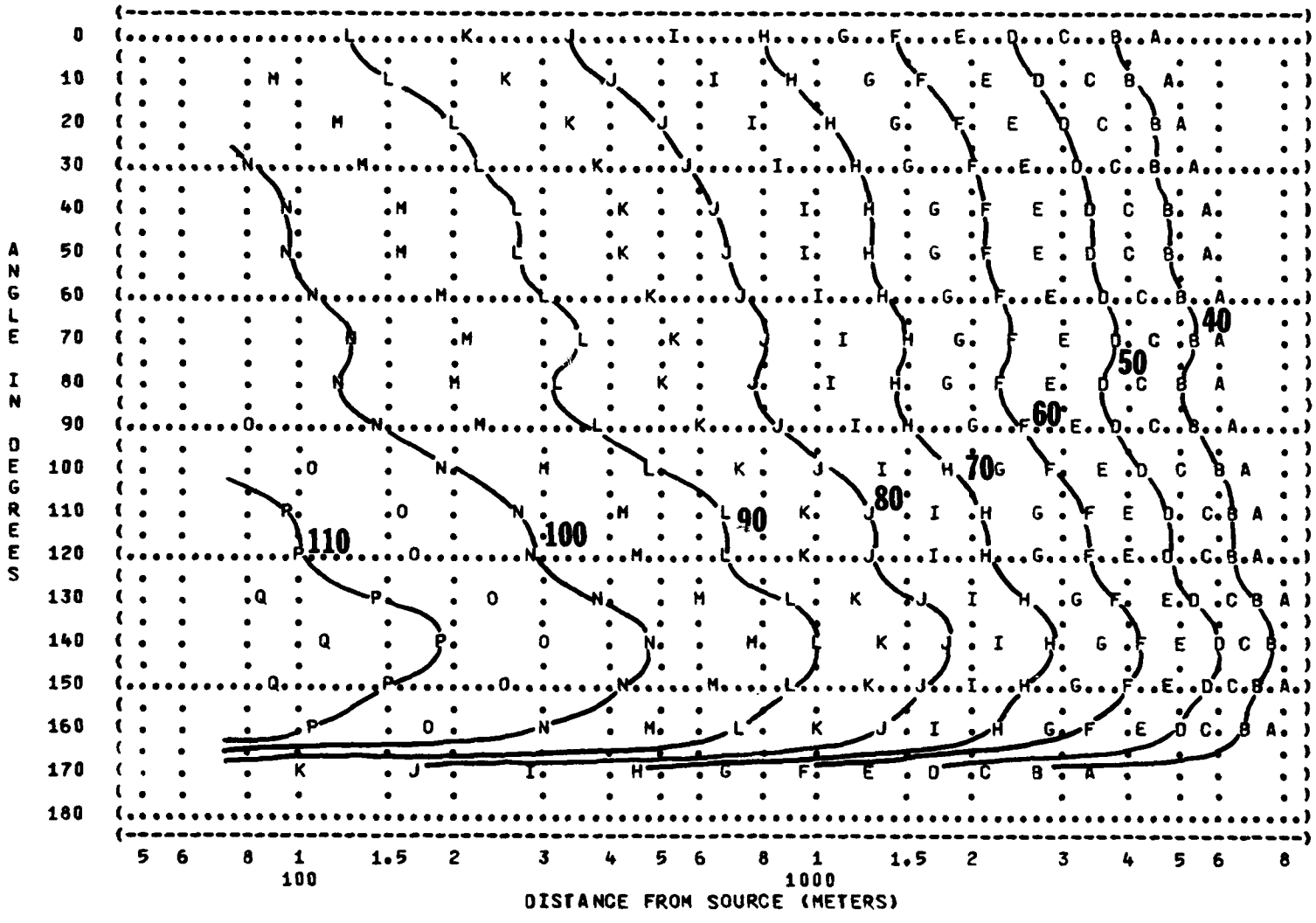
FIGURE: 9 PREFERRED SPEECH INTERFERENCE LEVEL (PSIL) EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 03
02 AUG 76
PAGE 17

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110
Q	115

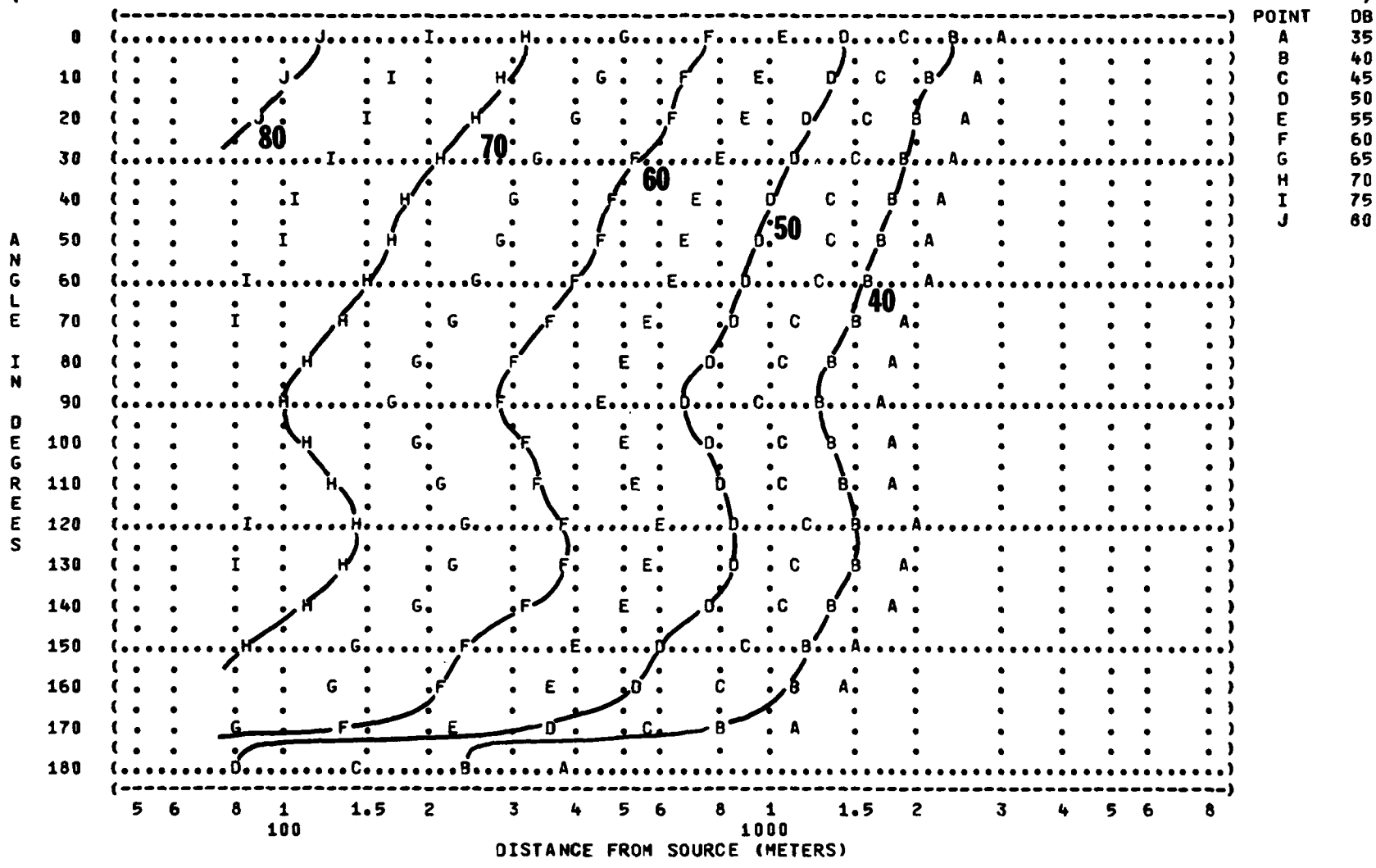
FIGURE 9: PREFERRED SPEECH INTERFERENCE LEVEL (PSIL) EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 04
02 AUG 76
PAGE 17

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80

FIGURE 9: PREFERRED SPEECH INTERFERENCE LEVEL (PSIL)
EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 05
02 AUG 76
PAGE 17

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105

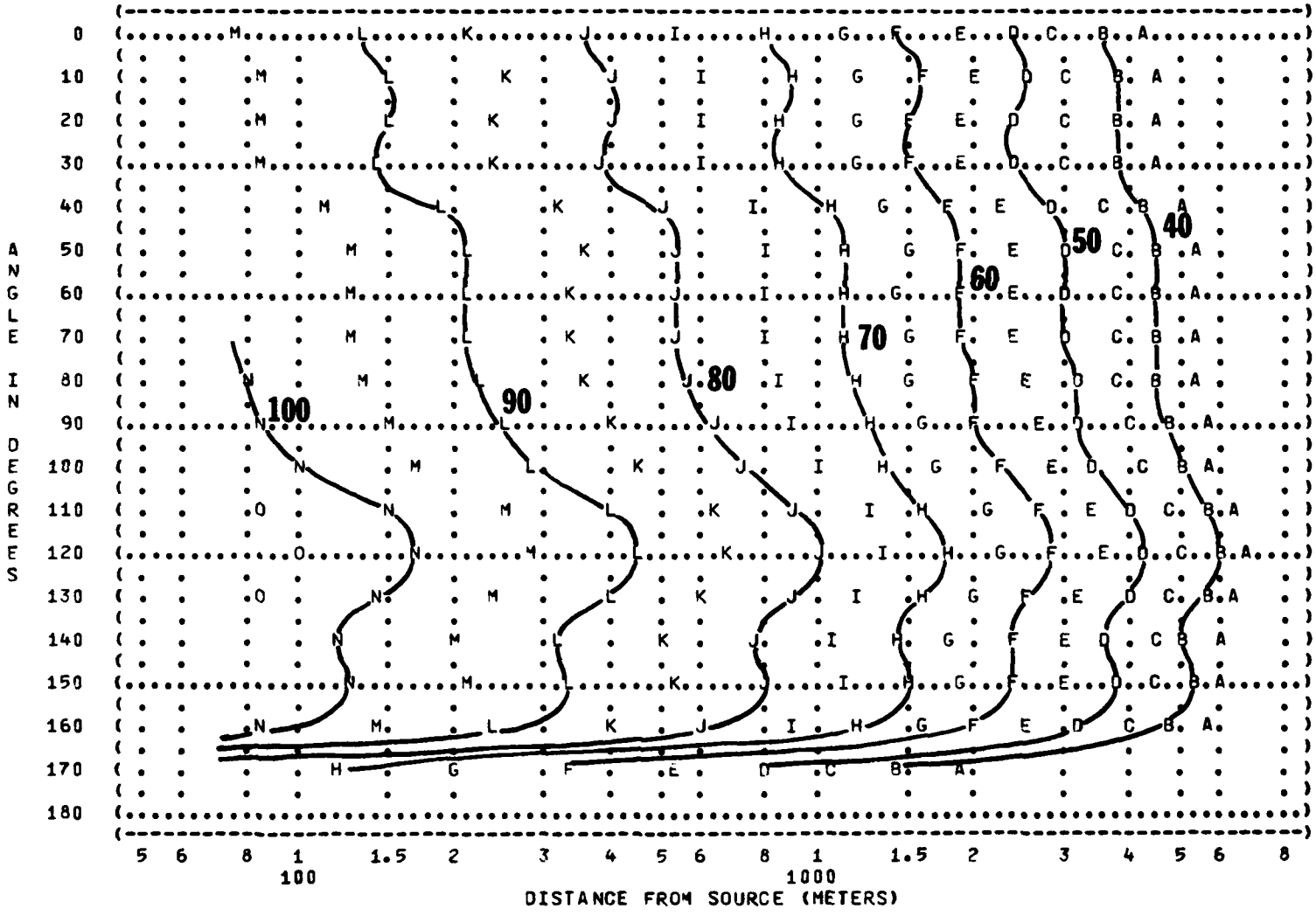


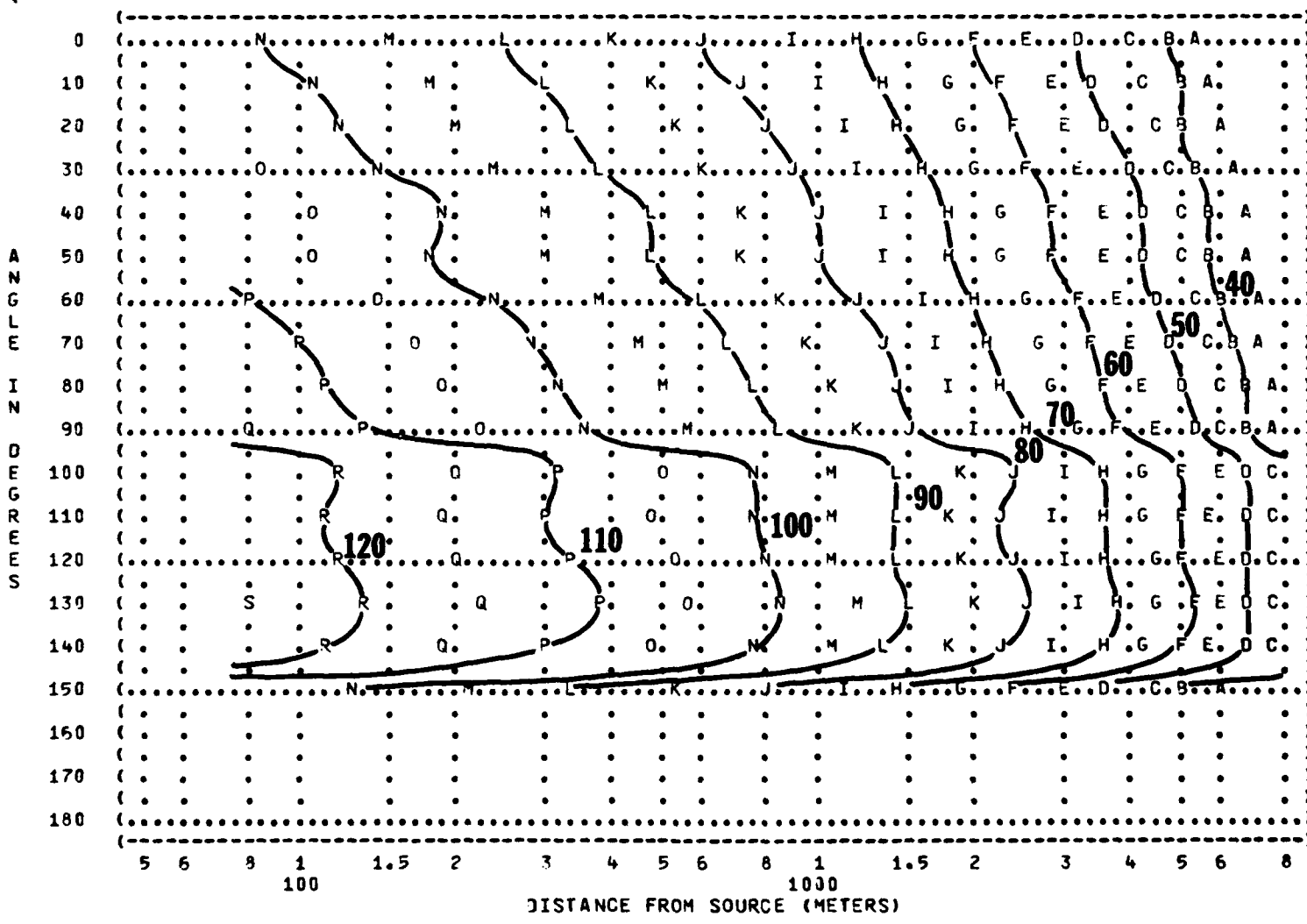
FIGURE 9 PREFERRED SPEECH INTERFERENCE LEVEL (PSIL) EQUAL LEVEL CONTOURS (DB)

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
DEFLECTED FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-059
RUN 03
09 AUG 76
PAGE 17



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110
Q	115
R	120
S	125

FIGURE 10: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
NO PROTECTION

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 01
02 AUG 76
PAGE 7

POINT	MIN
A	960
B	480
C	240
D	120

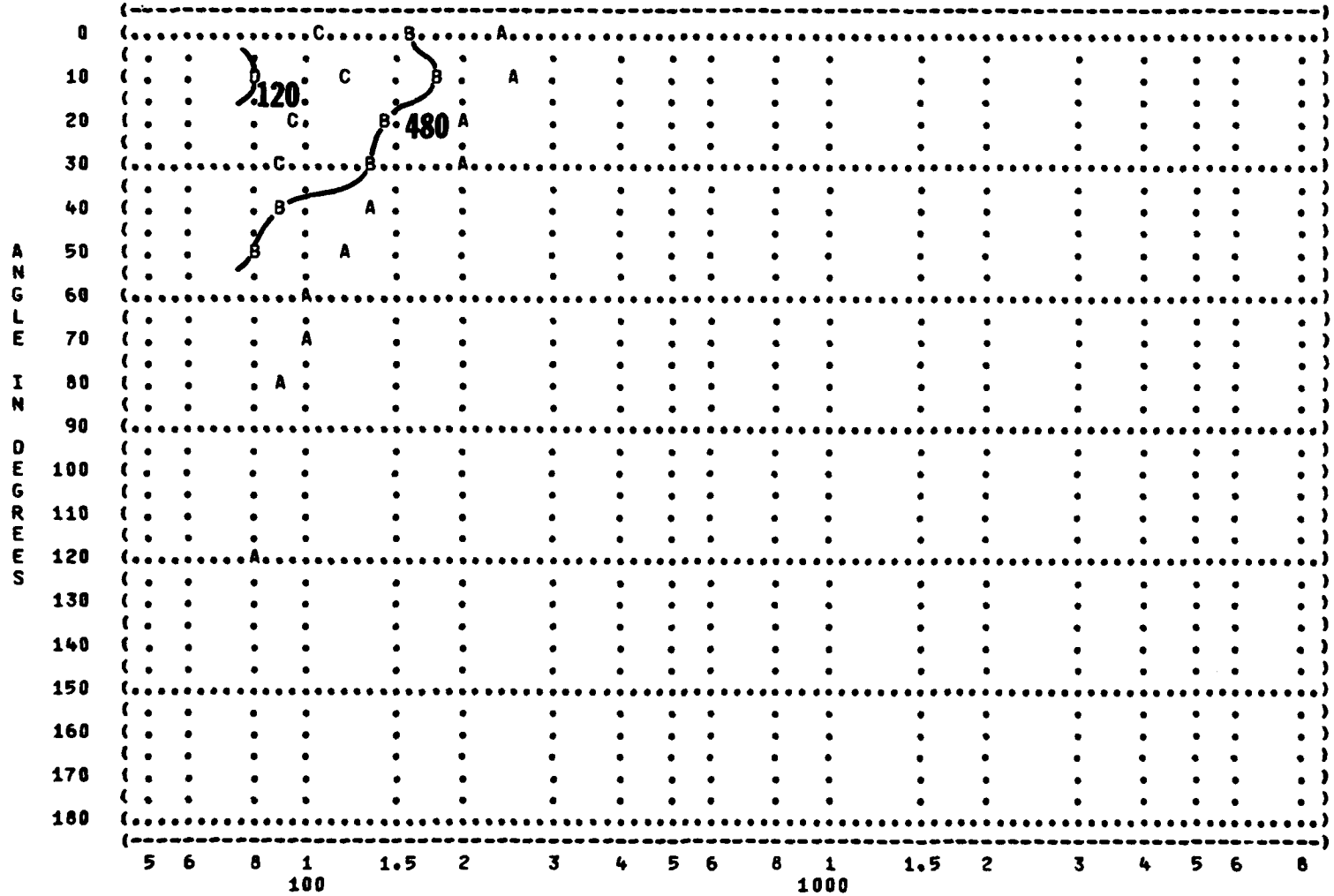


FIGURE 10: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 01
02 AUG 76
PAGE 8

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

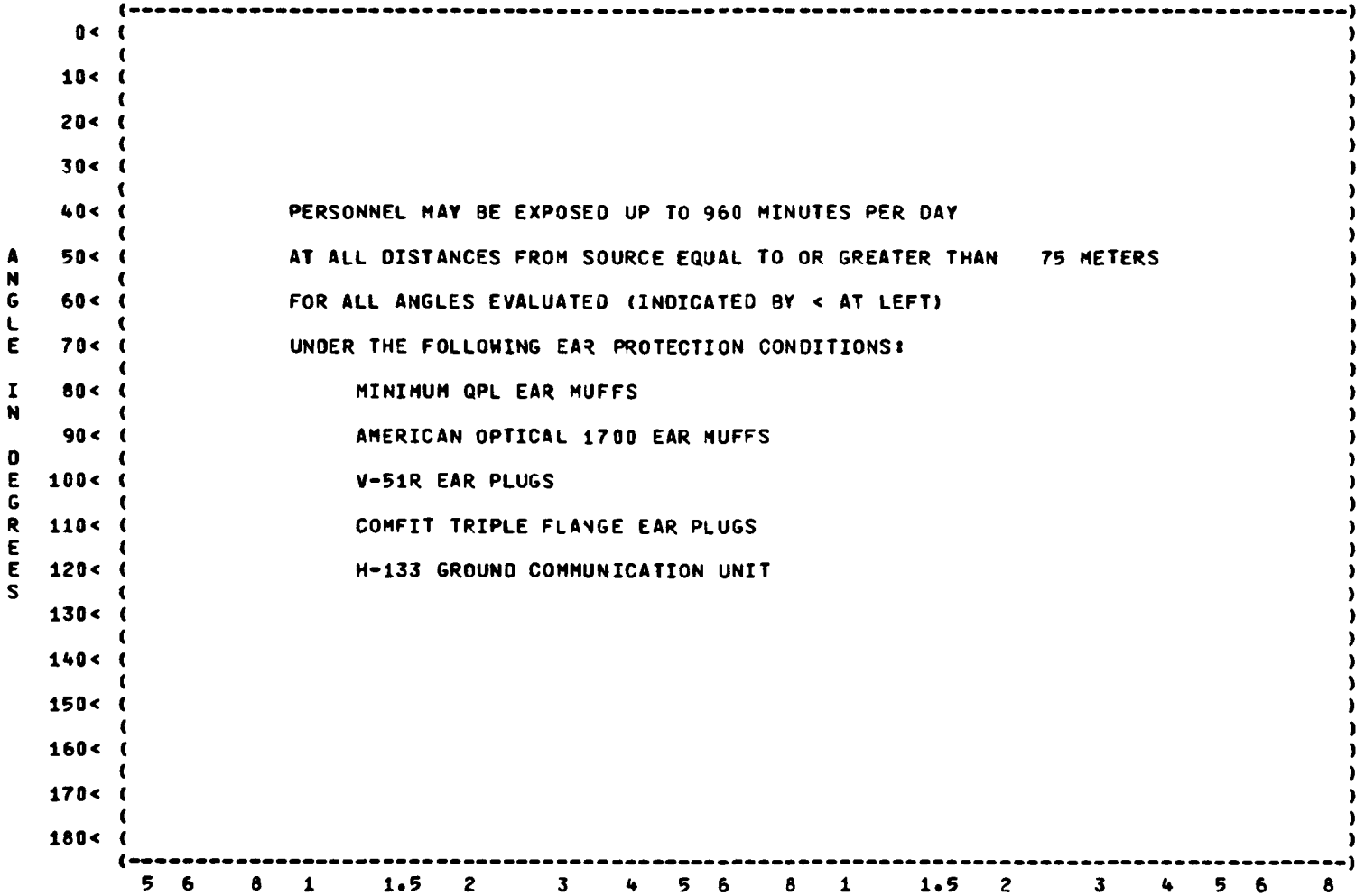


FIGURE: 10

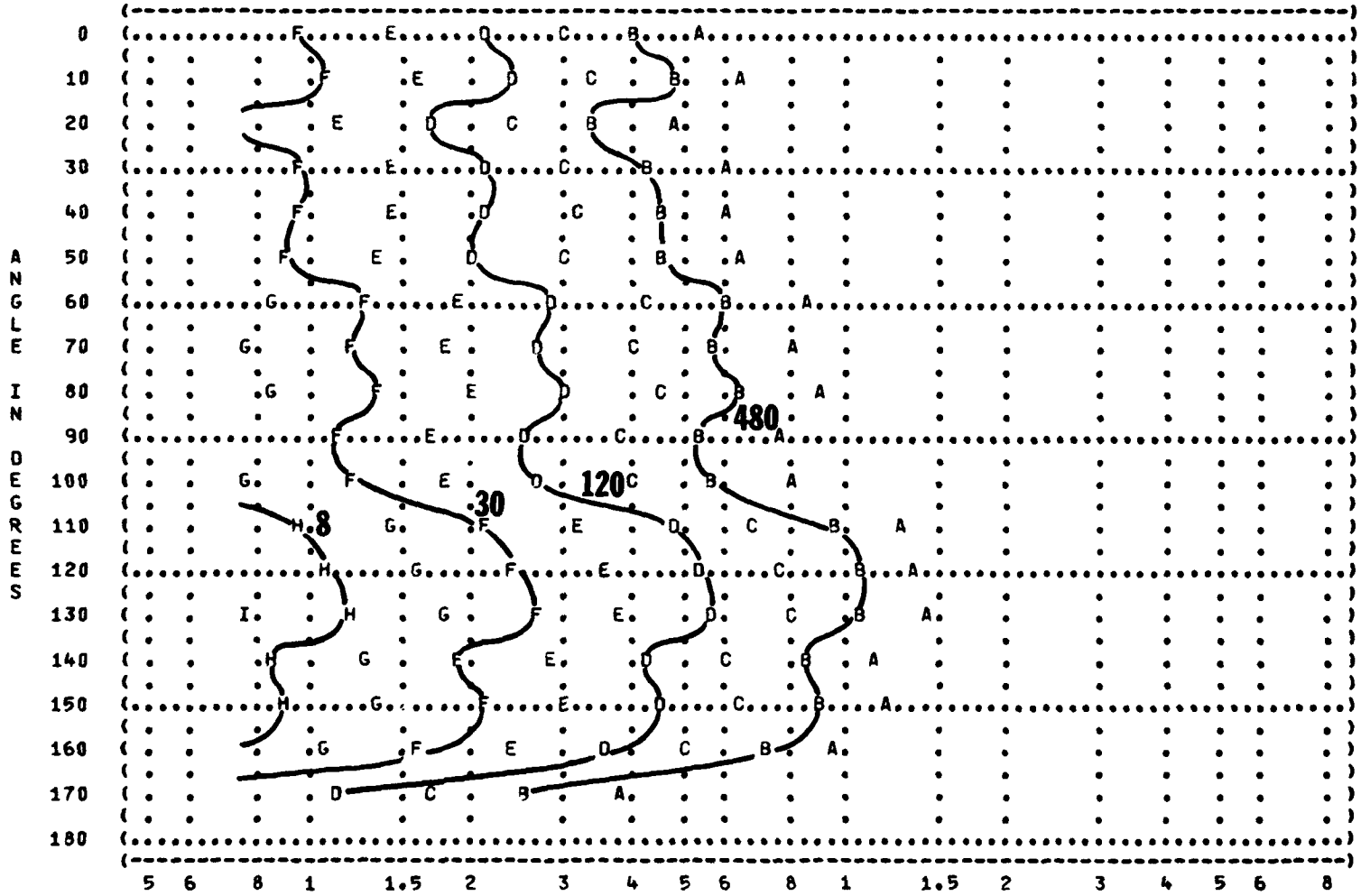
MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
NO PROTECTION

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 02
02 AUG 76
PAGE 7

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	MIN
A	960
B	480
C	240
D	120
E	60
F	30
G	15
H	8
I	4

FIGURE: 10

MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
MINIMUM QPL EAR MUFFS

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 02
02 AUG 76
PAGE 8

POINT	MIN
A	960
B	480
C	240
D	120

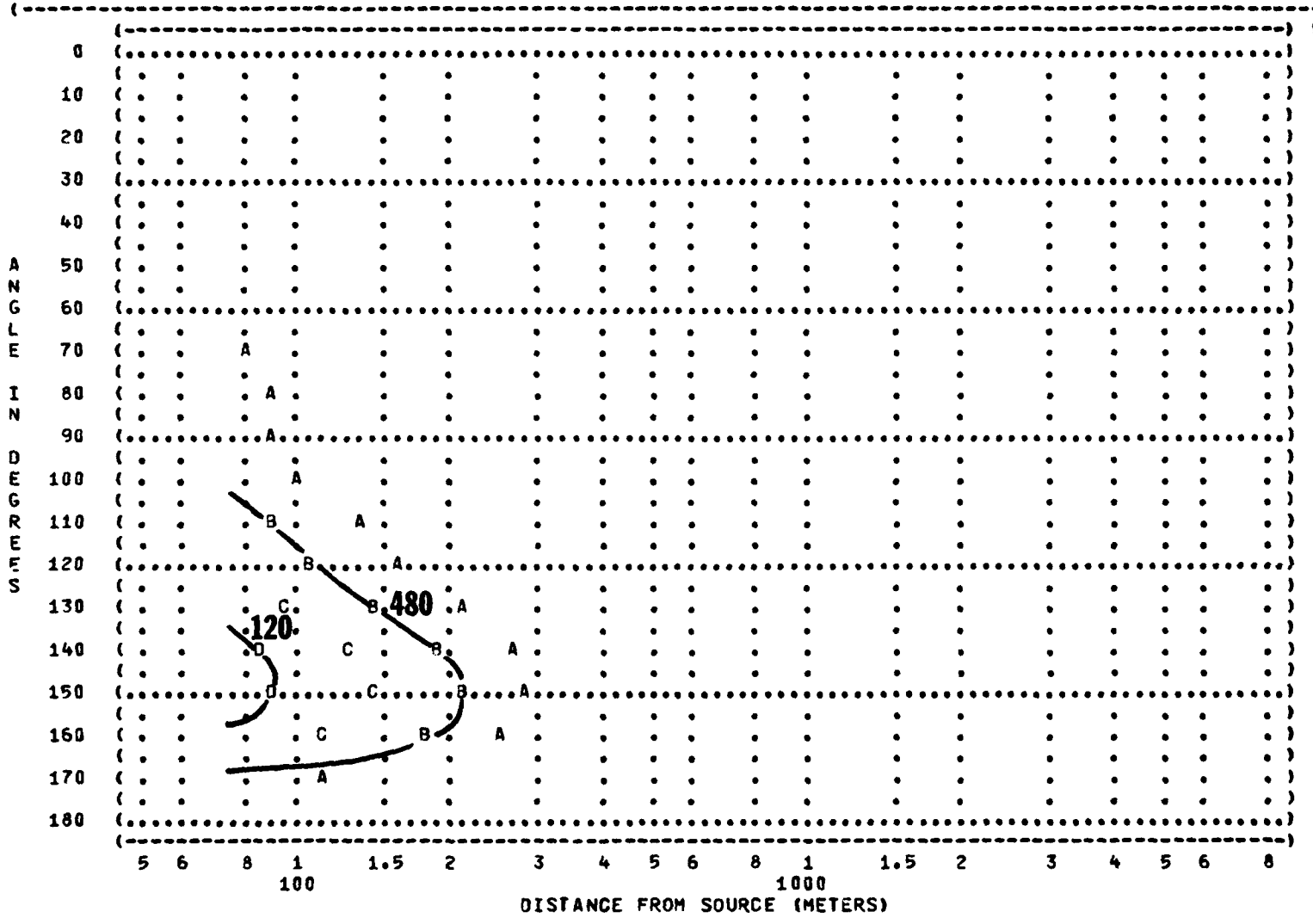


FIGURE 10: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
AMERICAN OPTICAL 1700 EAR MUFFS

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 02
02 AUG 76
PAGE 9

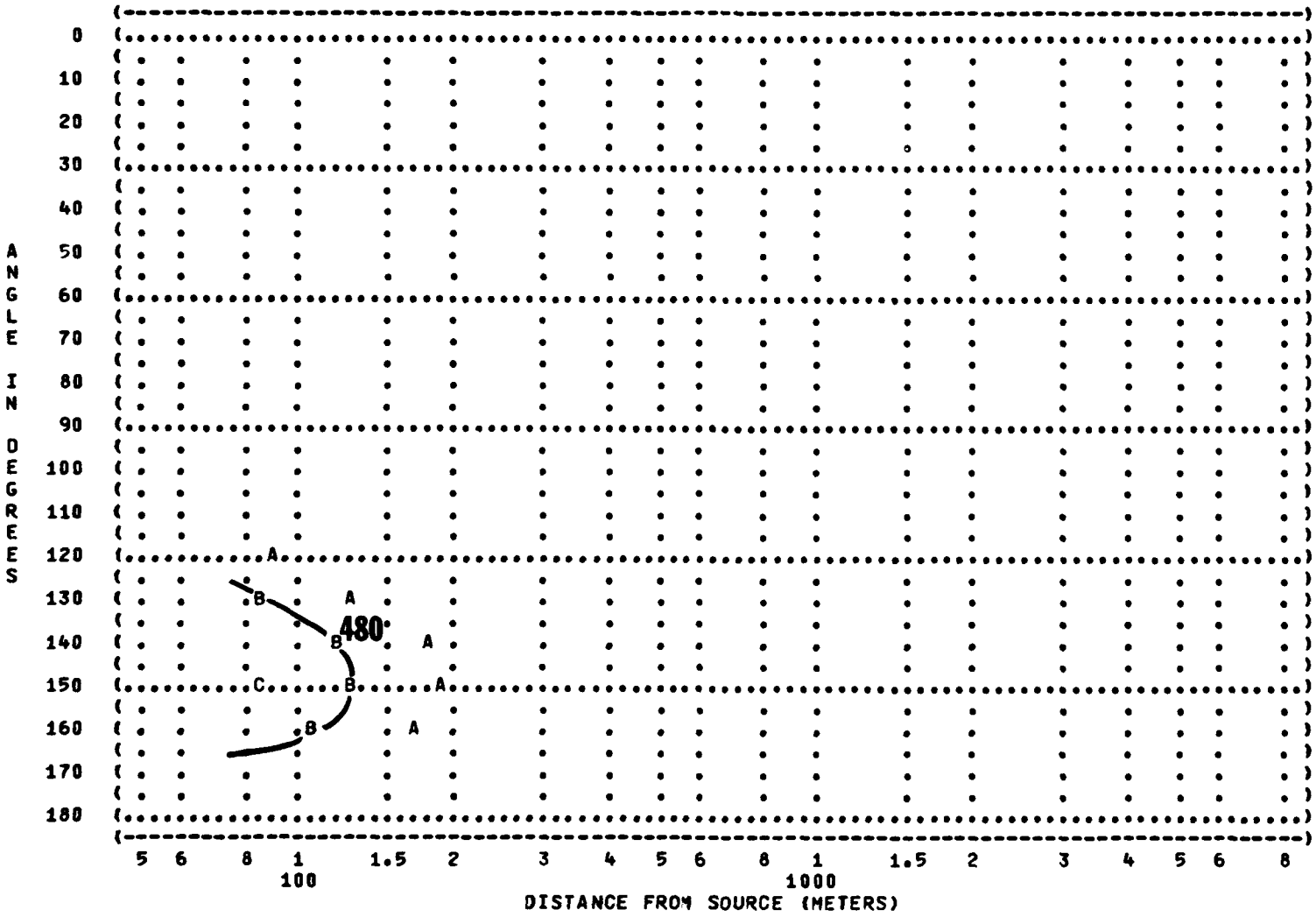


FIGURE: 10

MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
V-51R EAR PLUGS

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 02
02 AUG 76
PAGE 10

POINT	MIN
A	960
B	480
C	240

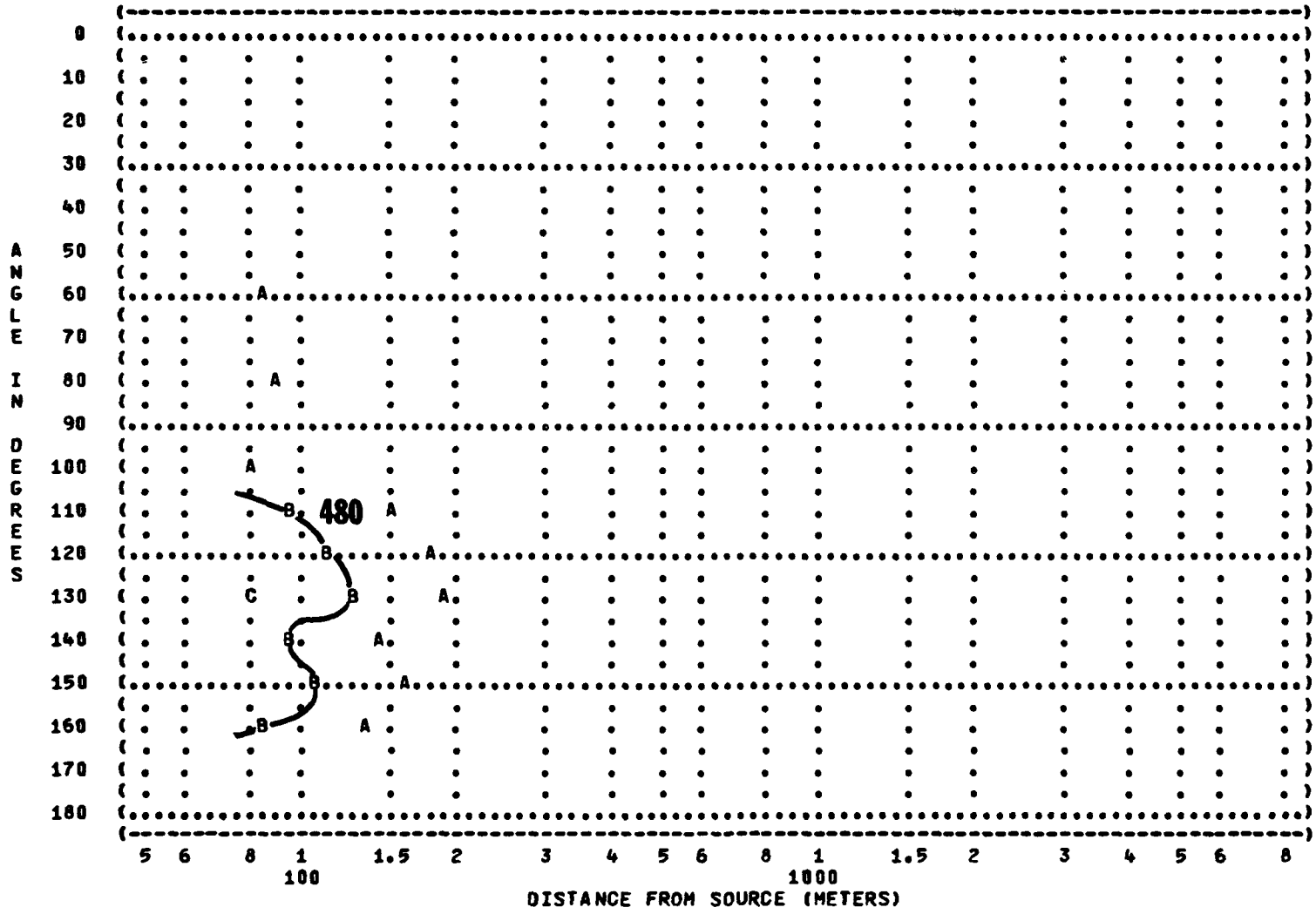


FIGURE 10: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
COMFIT TRIPLE FLANGE EAR PLUGS

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 02
02 AUG 76
PAGE 11

POINT	MIN
A	960
B	480
C	240

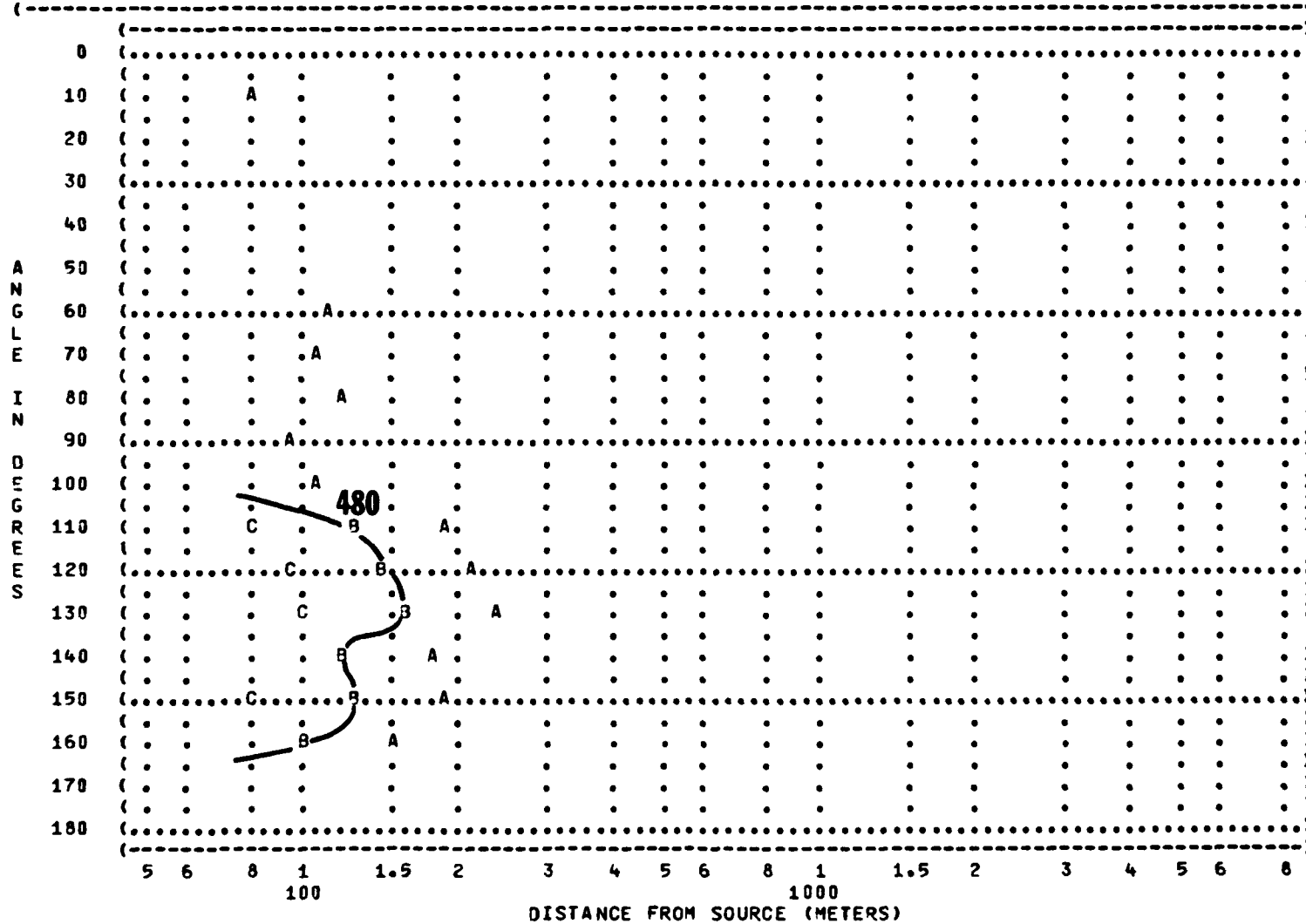


FIGURE 10: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
H-133 GROUND COMMUNICATION UNIT

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 02
02 AUG 76
PAGE 12

POINT	MIN
A	960

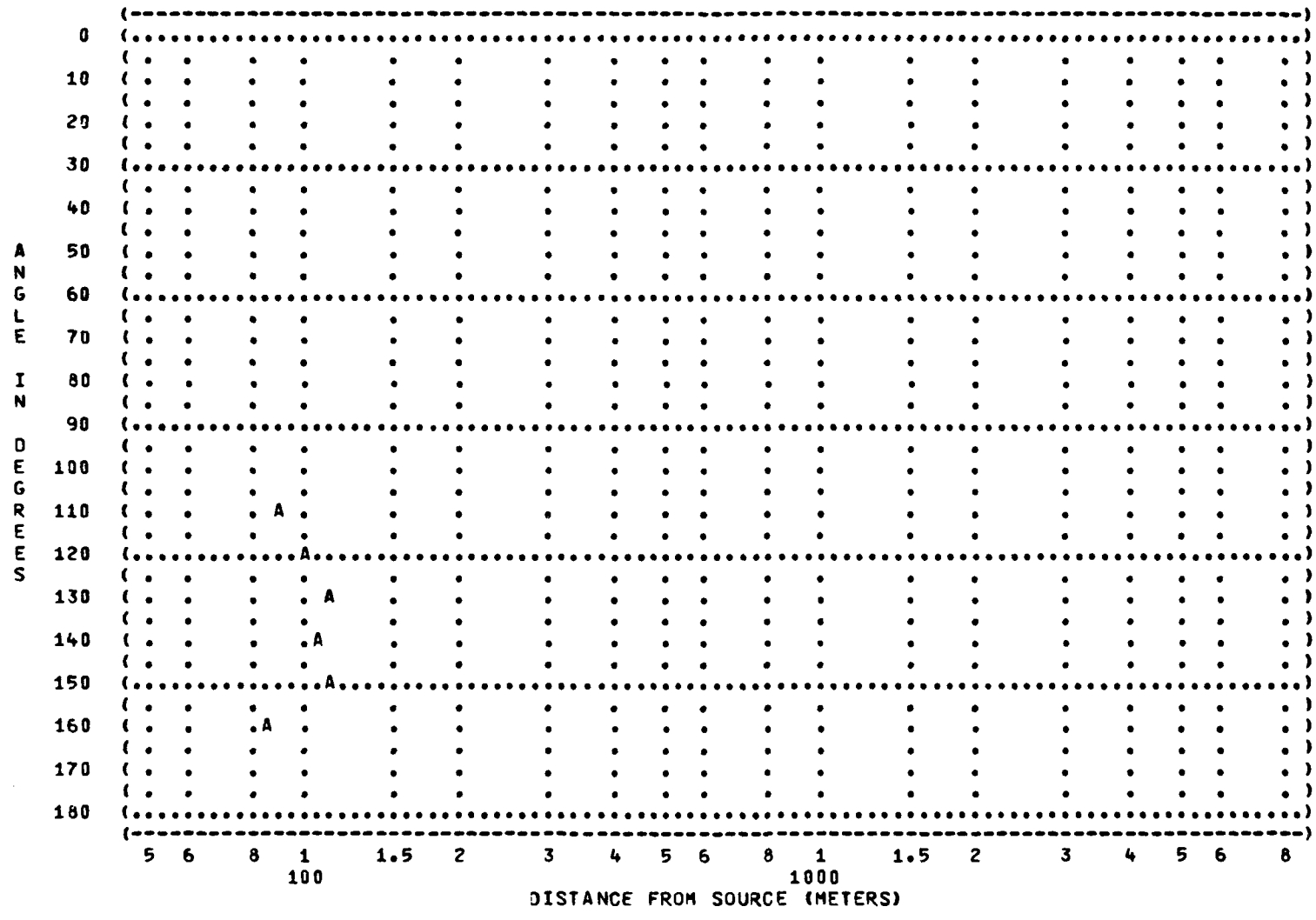


FIGURE: 10

MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
NO PROTECTION

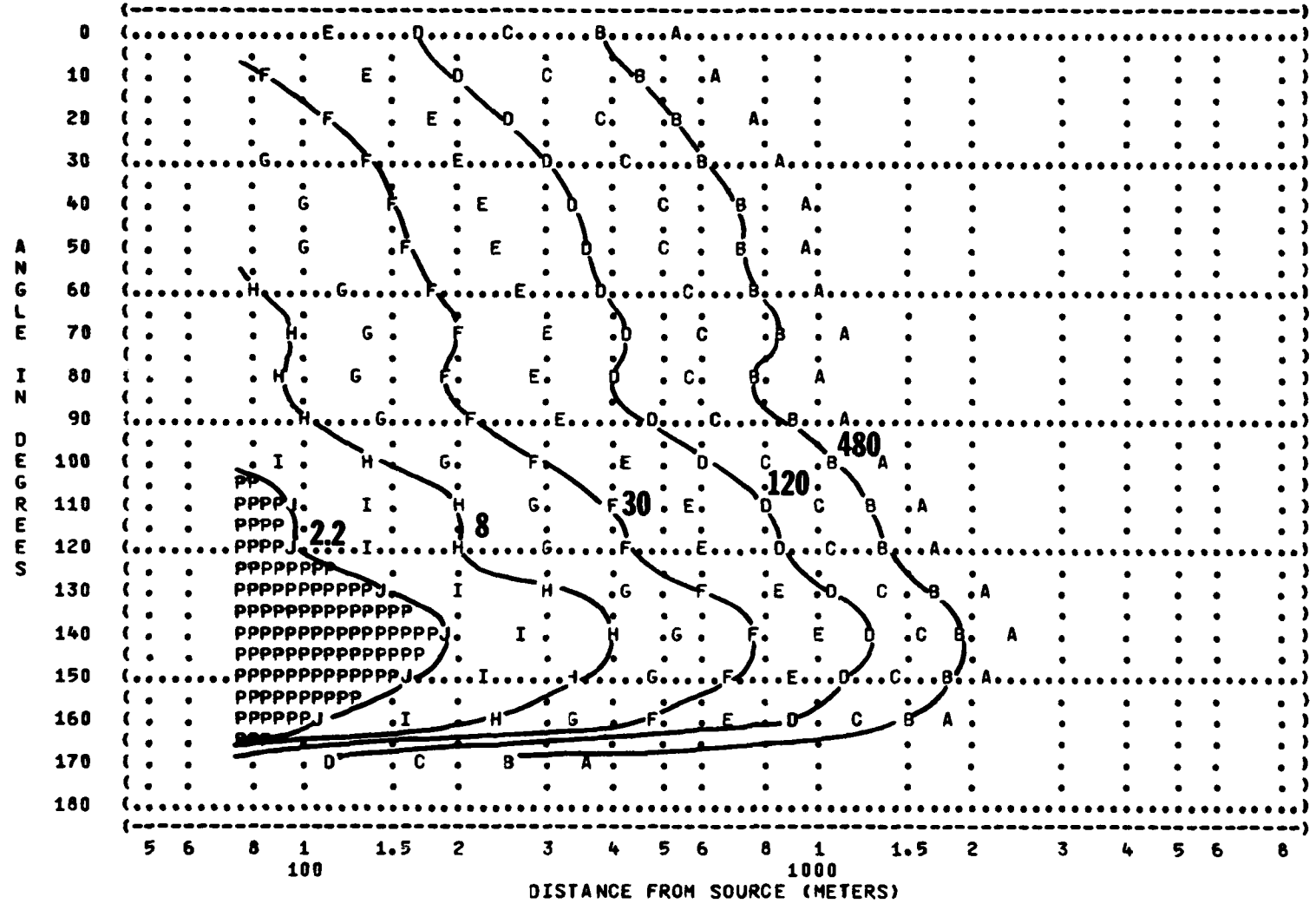
IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 03
02 AUG 76
PAGE 7

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	MIN
A	960
B	480
C	240
D	120
E	60
F	30
G	15
H	8
I	4
J	2.2



P ADDITIONAL EAR PROTECTION REQUIRED.

FIGURE: 10 MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
MINIMUM QPL EAR MUFFS

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 03
02 AUG 76
PAGE 8

POINT	MIN
A	960
B	480
C	240
D	120
E	60
F	30
G	15

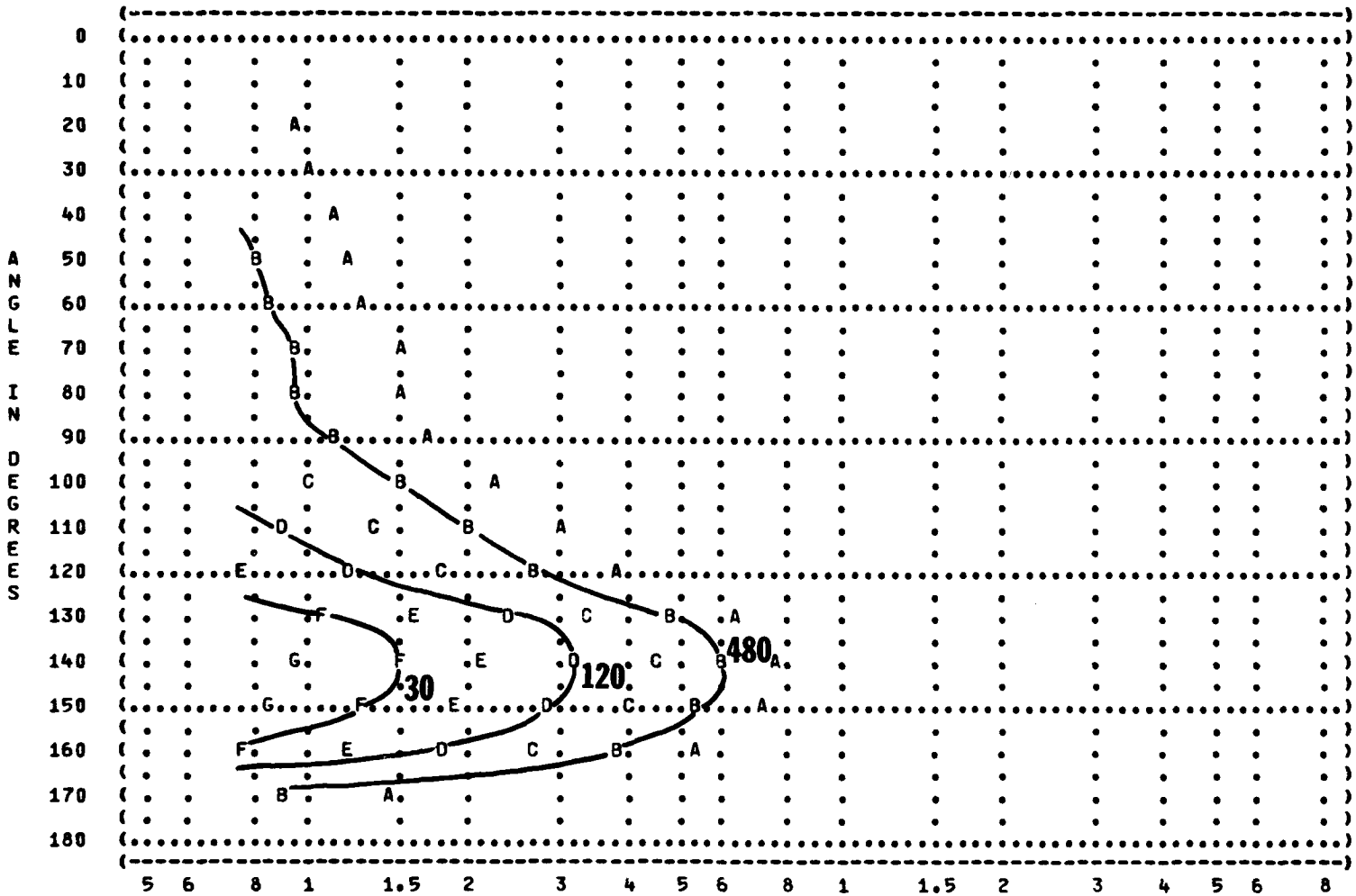


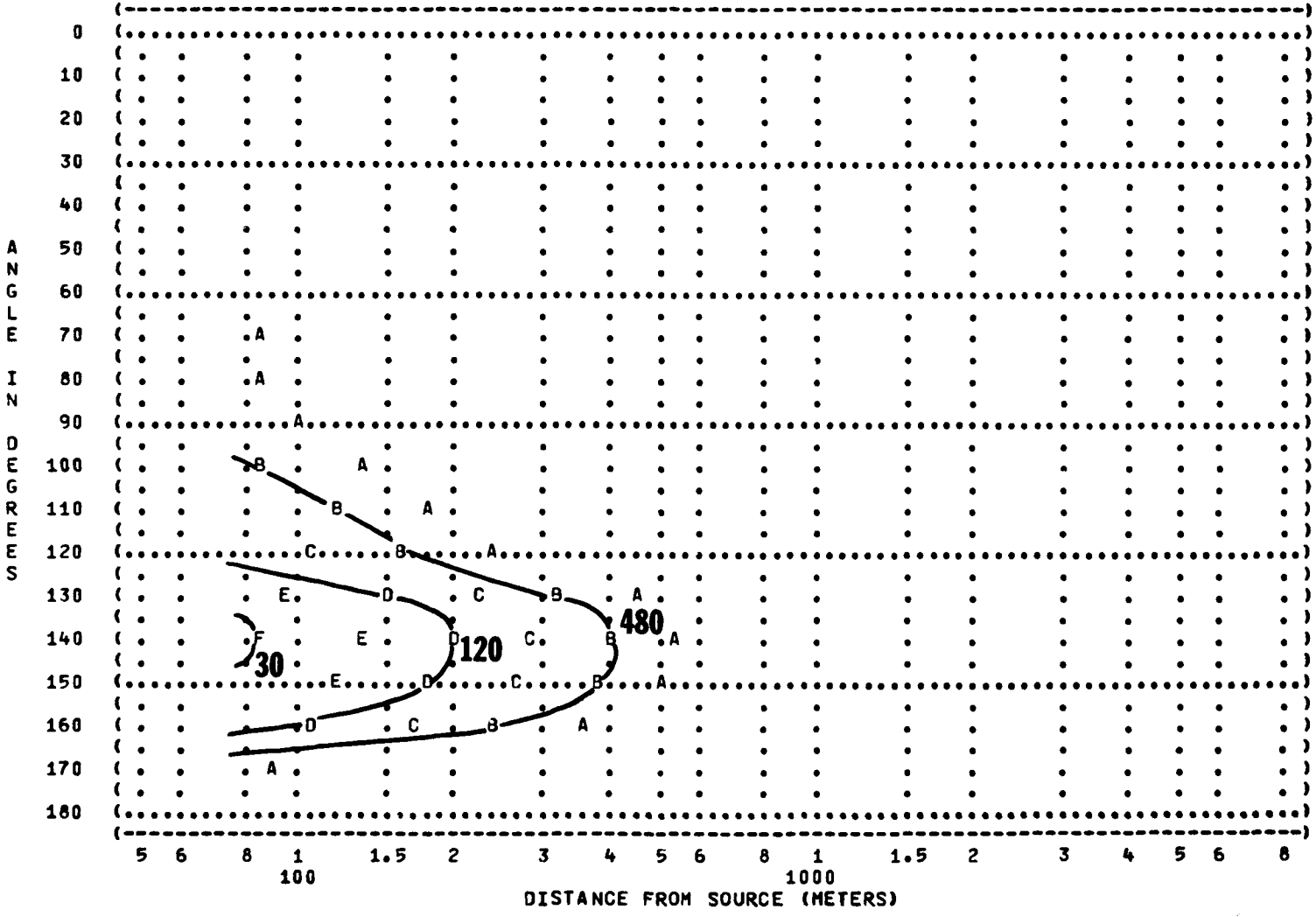
FIGURE 10: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
AMERICAN OPTICAL 1700 EAR MUFFS

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 03
02 AUG 76
PAGE 9



POINT	MIN
A	960
B	480
C	240
D	120
E	60
F	30

MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
V-51R EAR PLUGS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 03
02 AUG 76
PAGE 10

SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	MIN
A	960
B	480
C	240
D	120
E	60
F	30

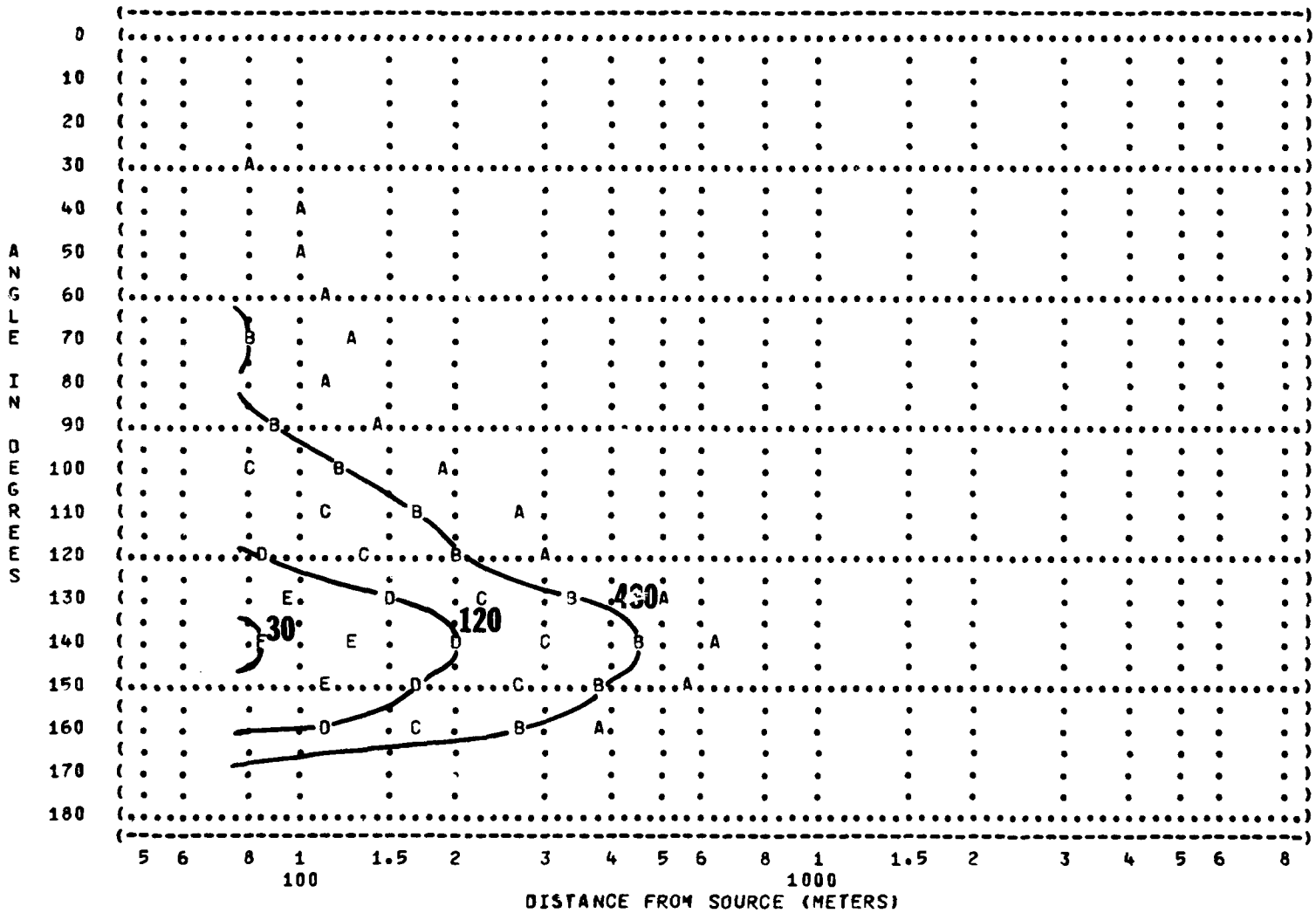


FIGURE: 10

MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
COMFIT TRIPLE FLANGE EAR PLUGS

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 03
02 AUG 76
PAGE 11

POINT	MIN
A	960
B	480
C	240
D	120
E	60
F	30

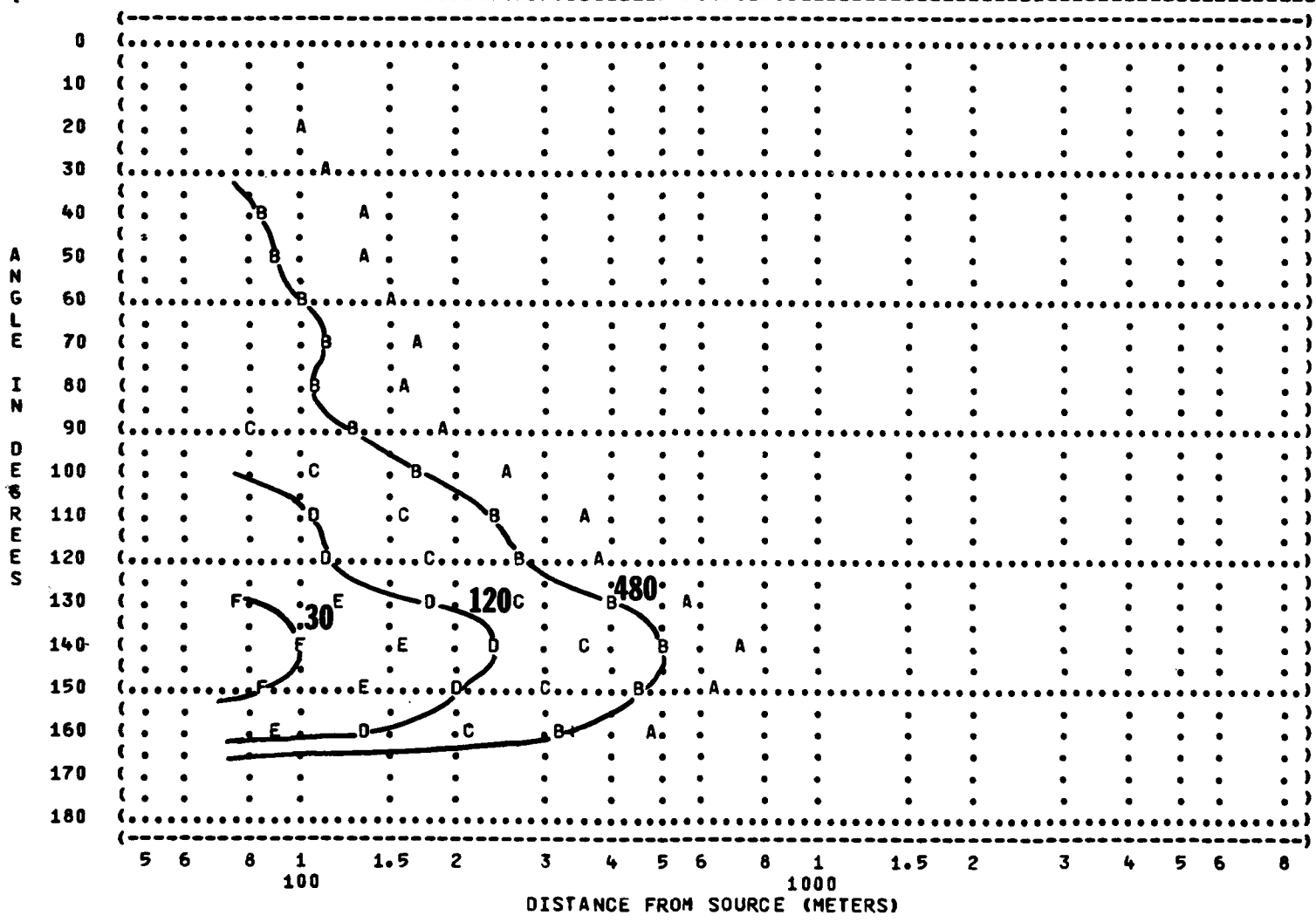


FIGURE: 10

MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
H-133 GROUND COMMUNICATION UNIT

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 03
02 AUG 76
PAGE 12

POINT	MIN
A	960
B	480
C	240
D	120
E	60

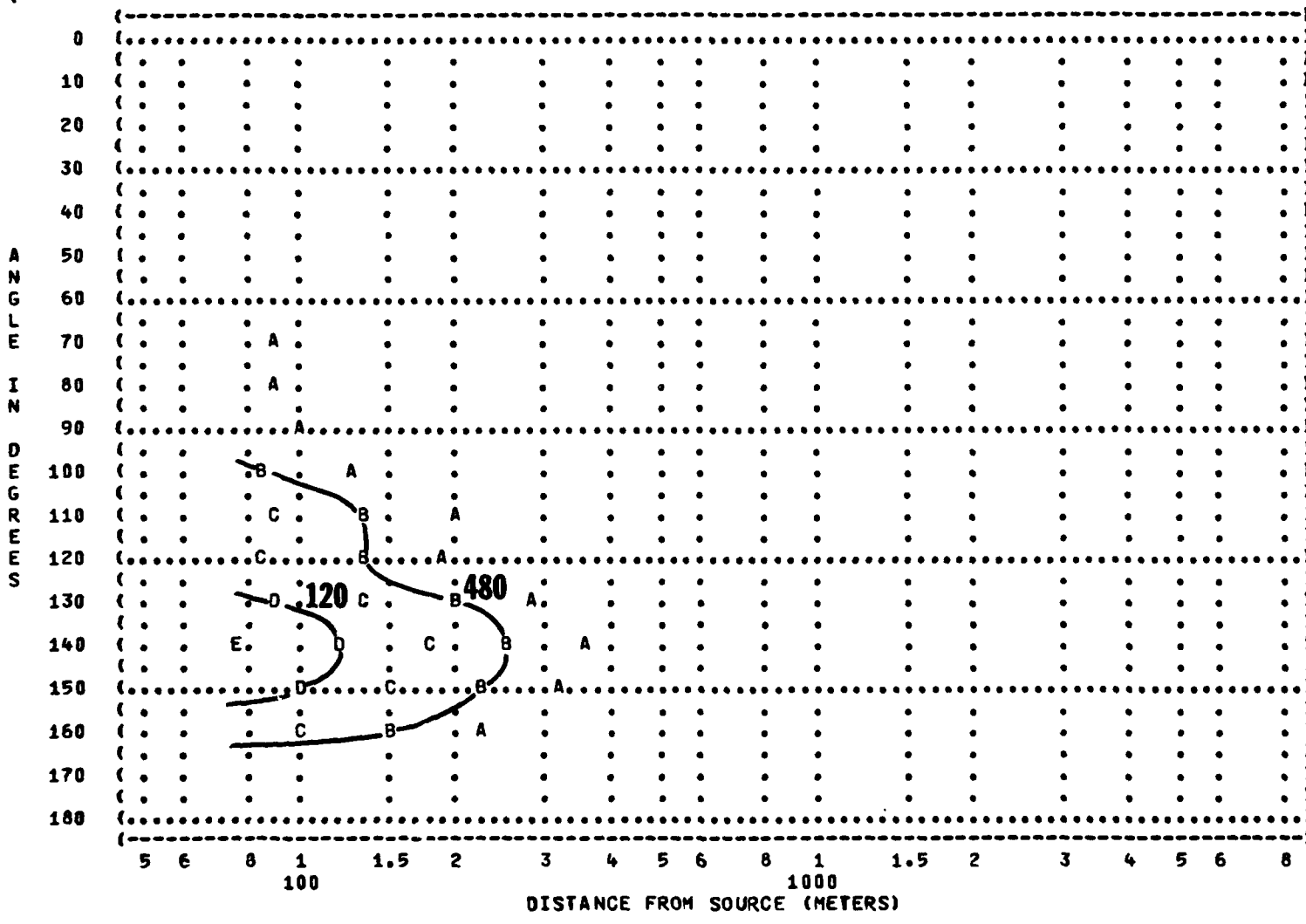


FIGURE 10: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
NO PROTECTION

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 04
02 AUG 76
PAGE 7

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	MIN
A	960
B	480
C	240

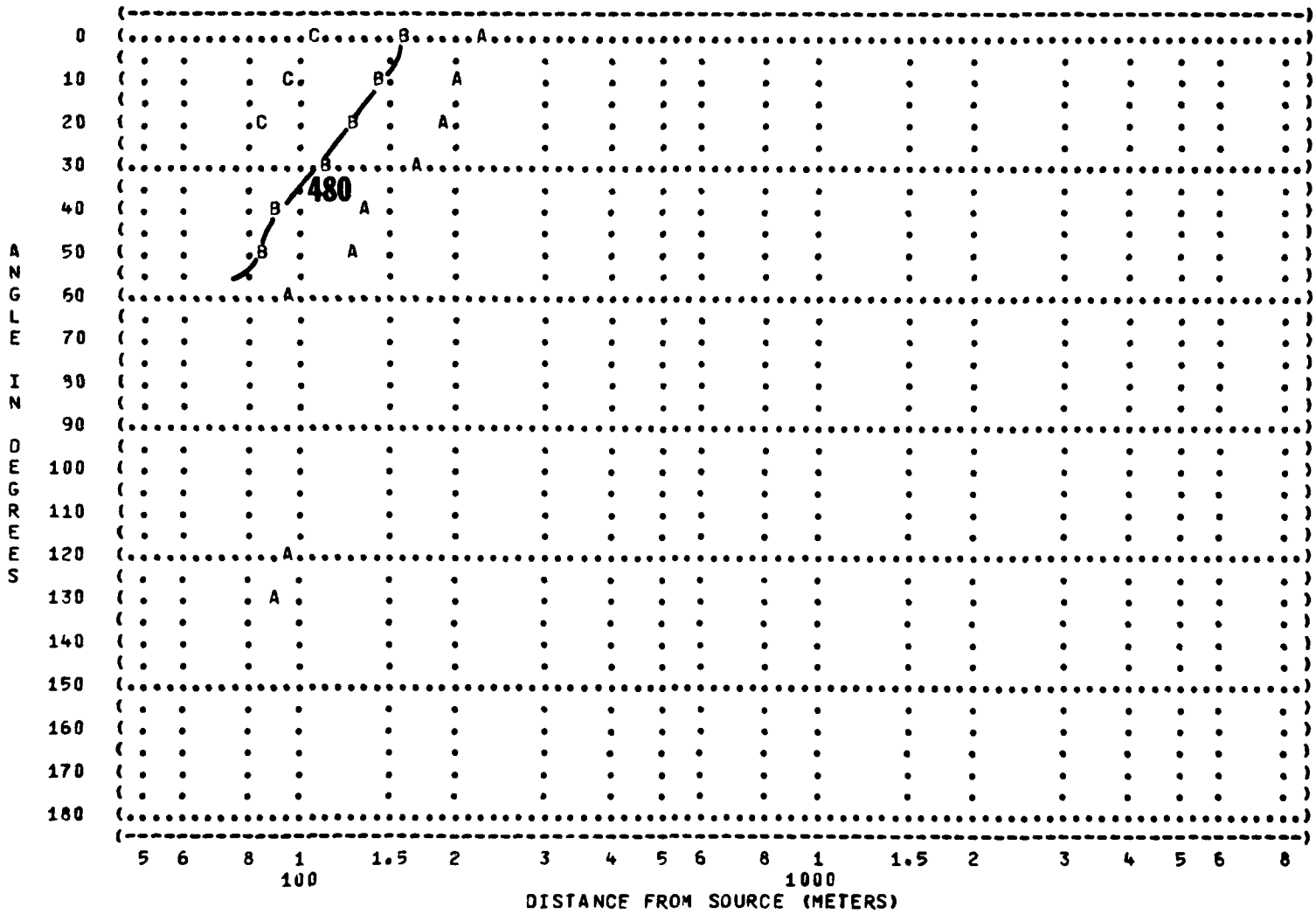


FIGURE: 10	MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73) EQUAL TIME CONTOURS (MINUTES)	IDENTIFICATION:
NOISE SOURCE/SUBJECT:	OPERATION:	METEOROLOGY:
F-4C AIRCRAFT J79-GE-15/A ENGINE GROUND RUNUP NOISE	IDLE POWER 65% RPM BOTH ENGINES FREE FLOW	TEMP = 15 C BAR PRESS = .760 M HG REL HUMID = 70 %

OMEGA 1.4
TEST 75-002-026
RUN 04
02 AUG 76
PAGE 8

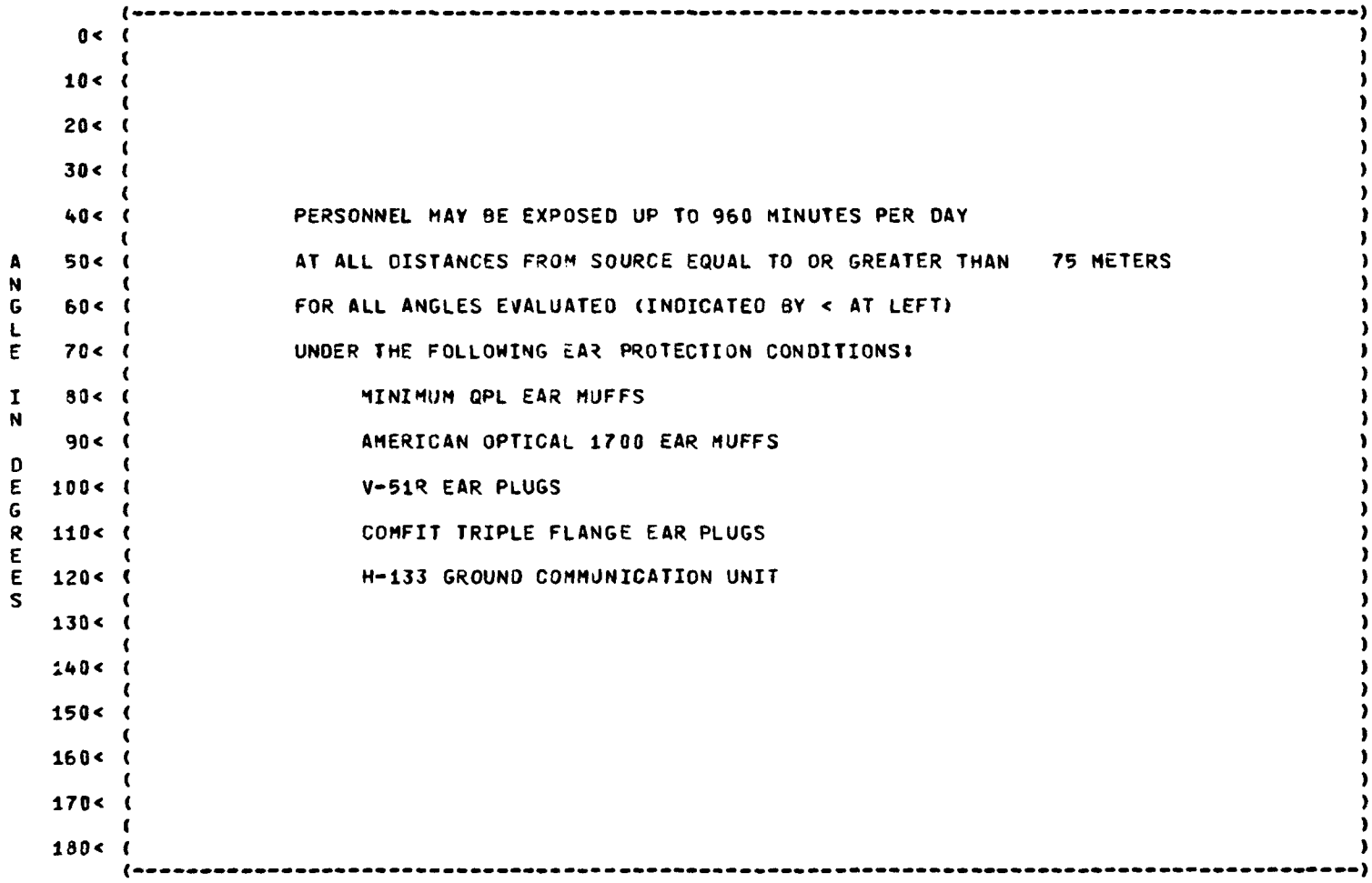


FIGURE: 10 MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
NO PROTECTION

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 05
02 AUG 76
PAGE 7

POINT	MIN
A	960
B	480
C	240
D	120
E	60
F	30
G	15
H	8
I	4

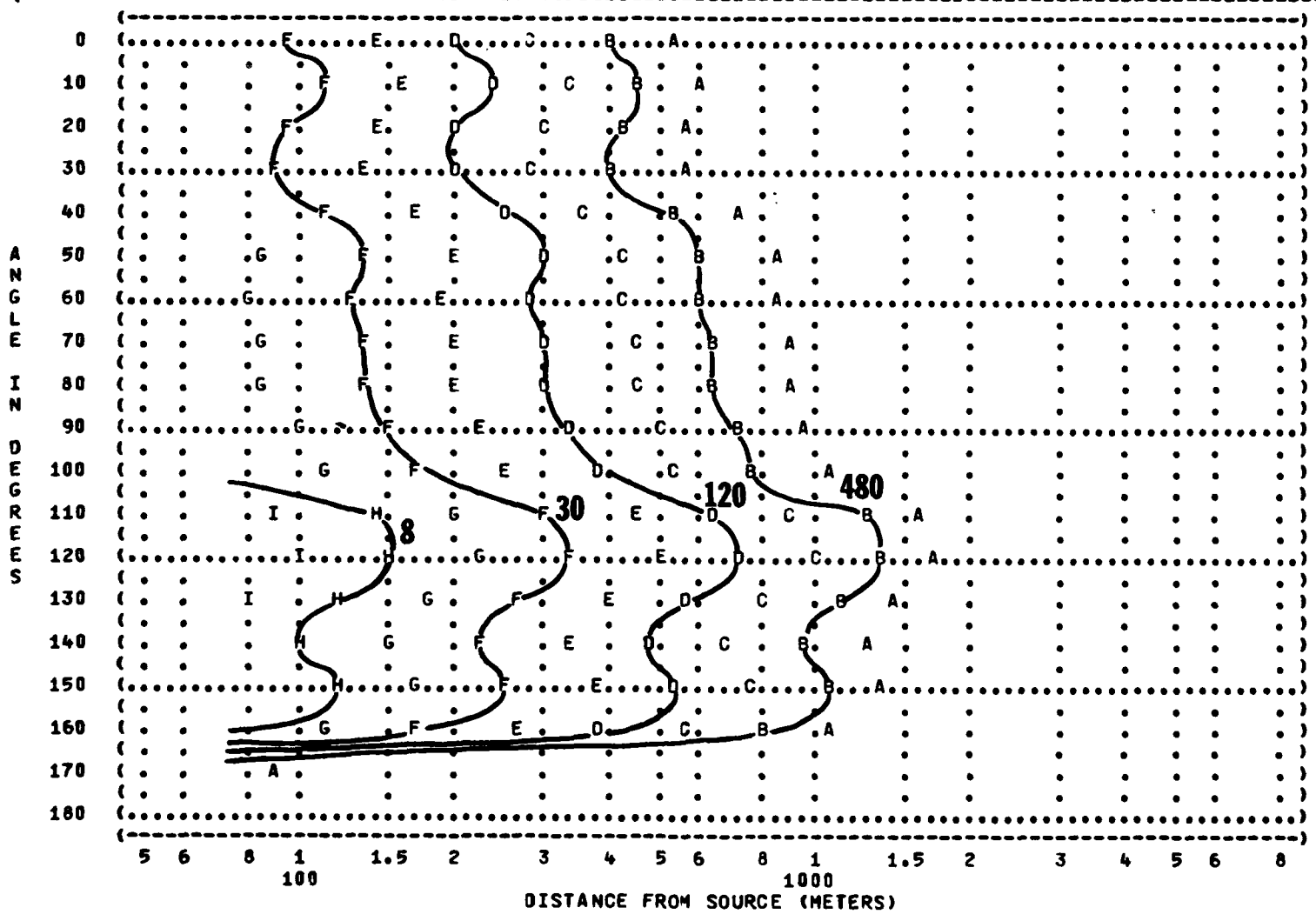


FIGURE 10: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
MINIMUM QPL EAR MUFFS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 05
02 AUG 76
PAGE 8

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	MIN
A	960
B	480
C	240
D	120

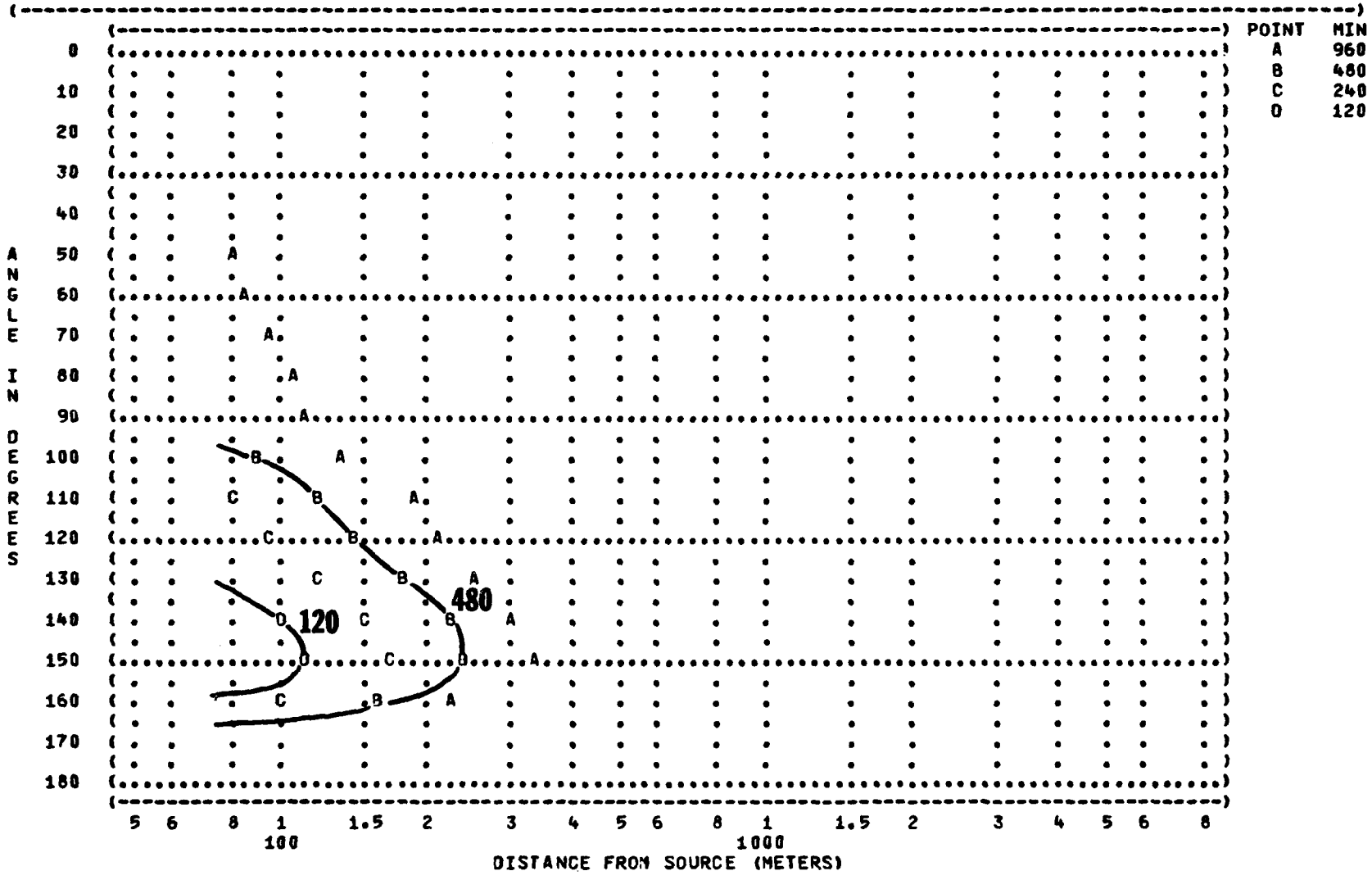


FIGURE 10: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
AMERICAN OPTICAL 1700 EAR MUFFS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 05
02 AUG 76
PAGE 9

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	MIN
A	960
B	480
C	240

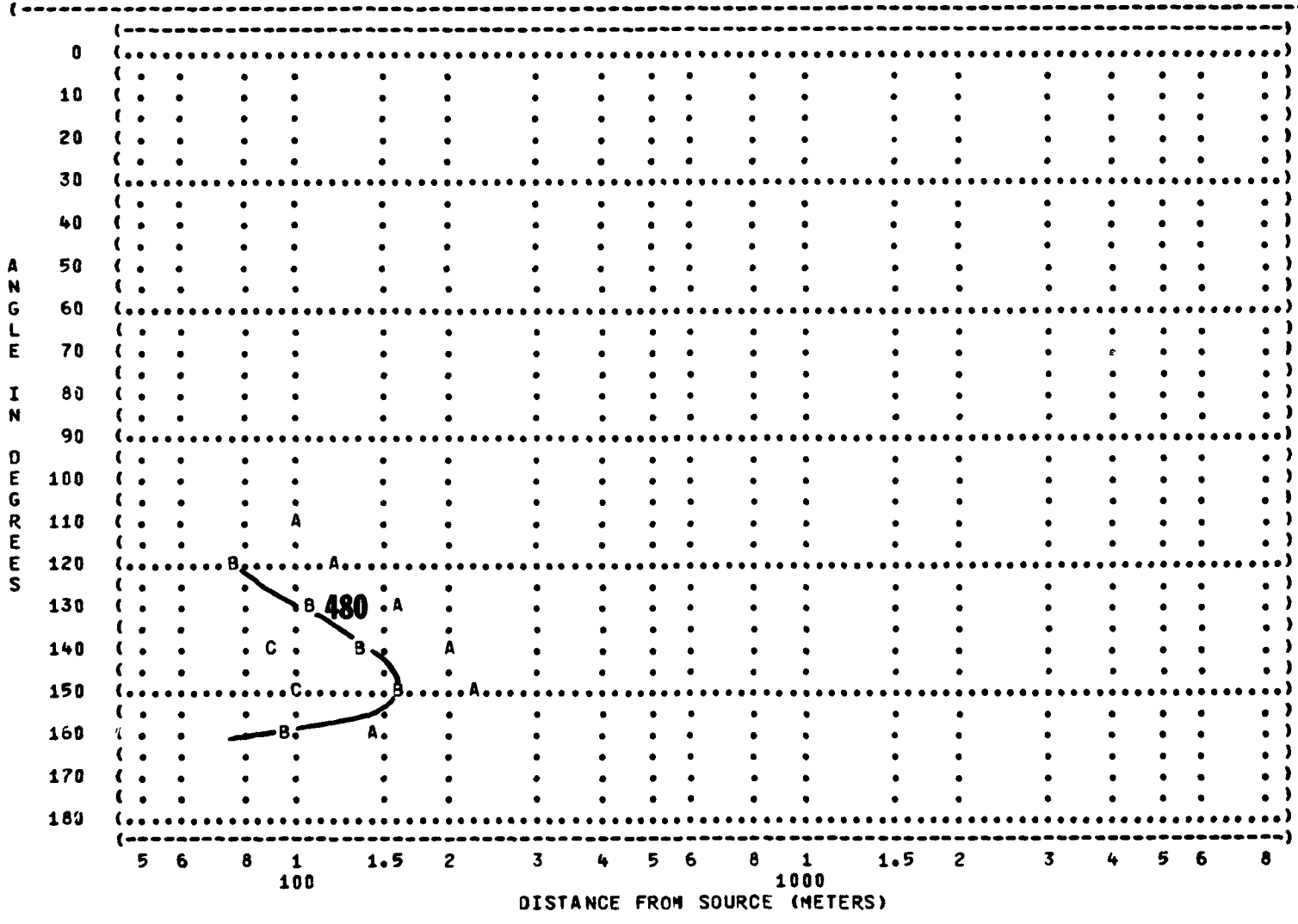


FIGURE 10: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
V-51R EAR PLUGS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 05
02 AUG 76
PAGE 10

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	MIN
A	960
B	480
C	240

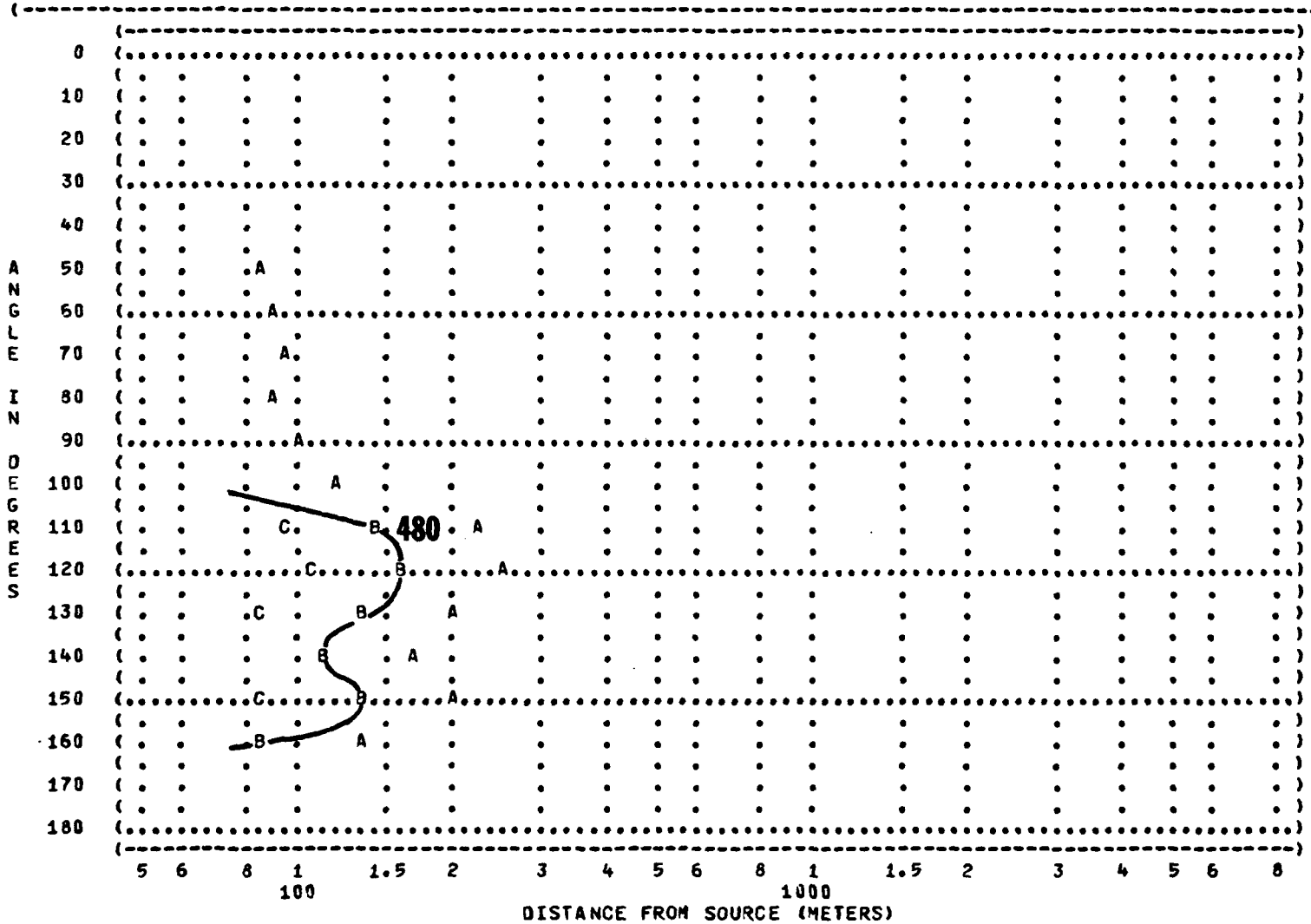


FIGURE: 10

MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
COMFIT TRIPLE FLANGE EAR PLUGS

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 05

02 AUG 76

PAGE 11

POINT	MIN
A	960
B	480
C	240
D	120

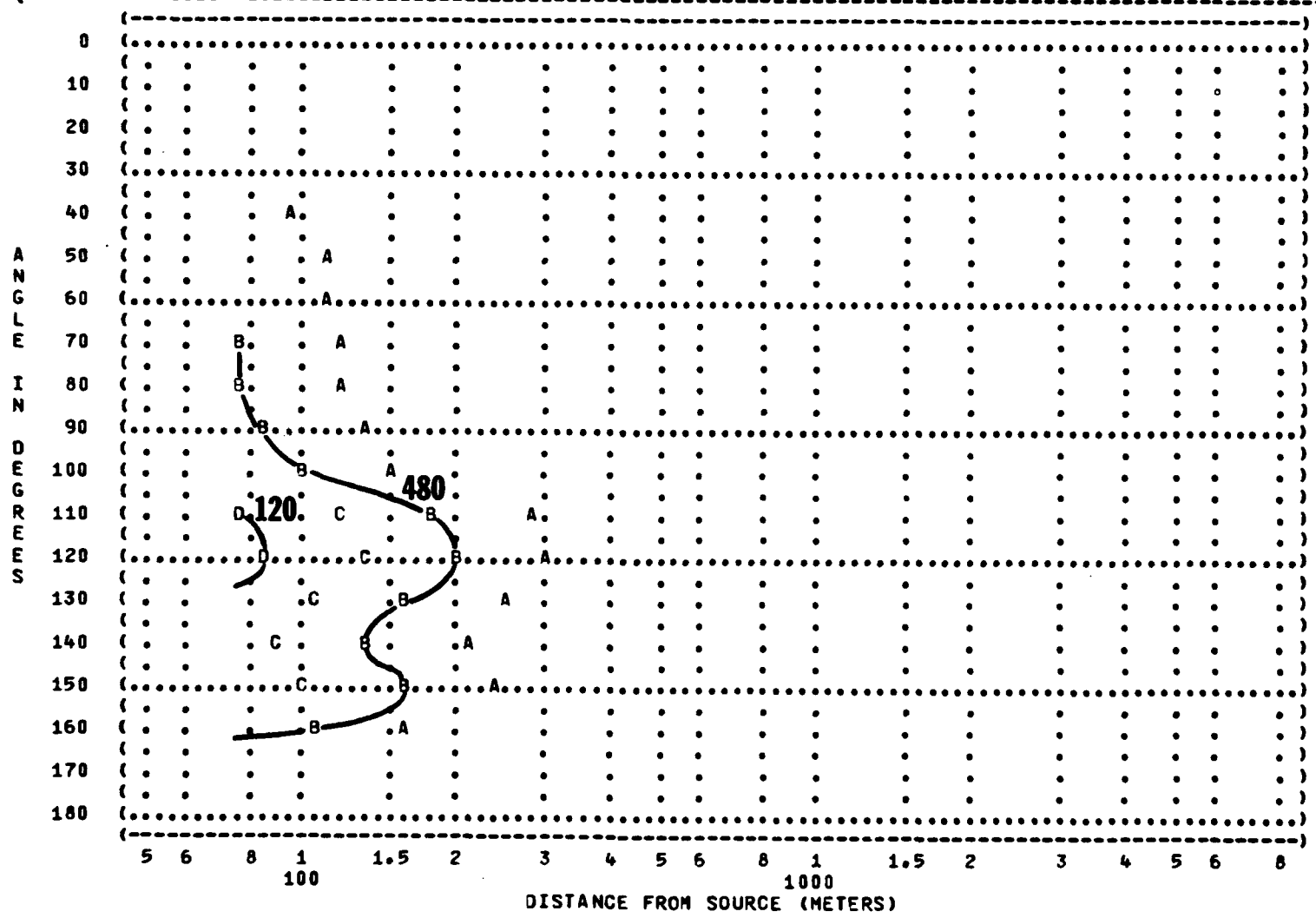


FIGURE: 10

MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
H-133 GROUND COMMUNICATION UNIT

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 05
02 AUG 76
PAGE 12

POINT	MIN
A	960
B	480

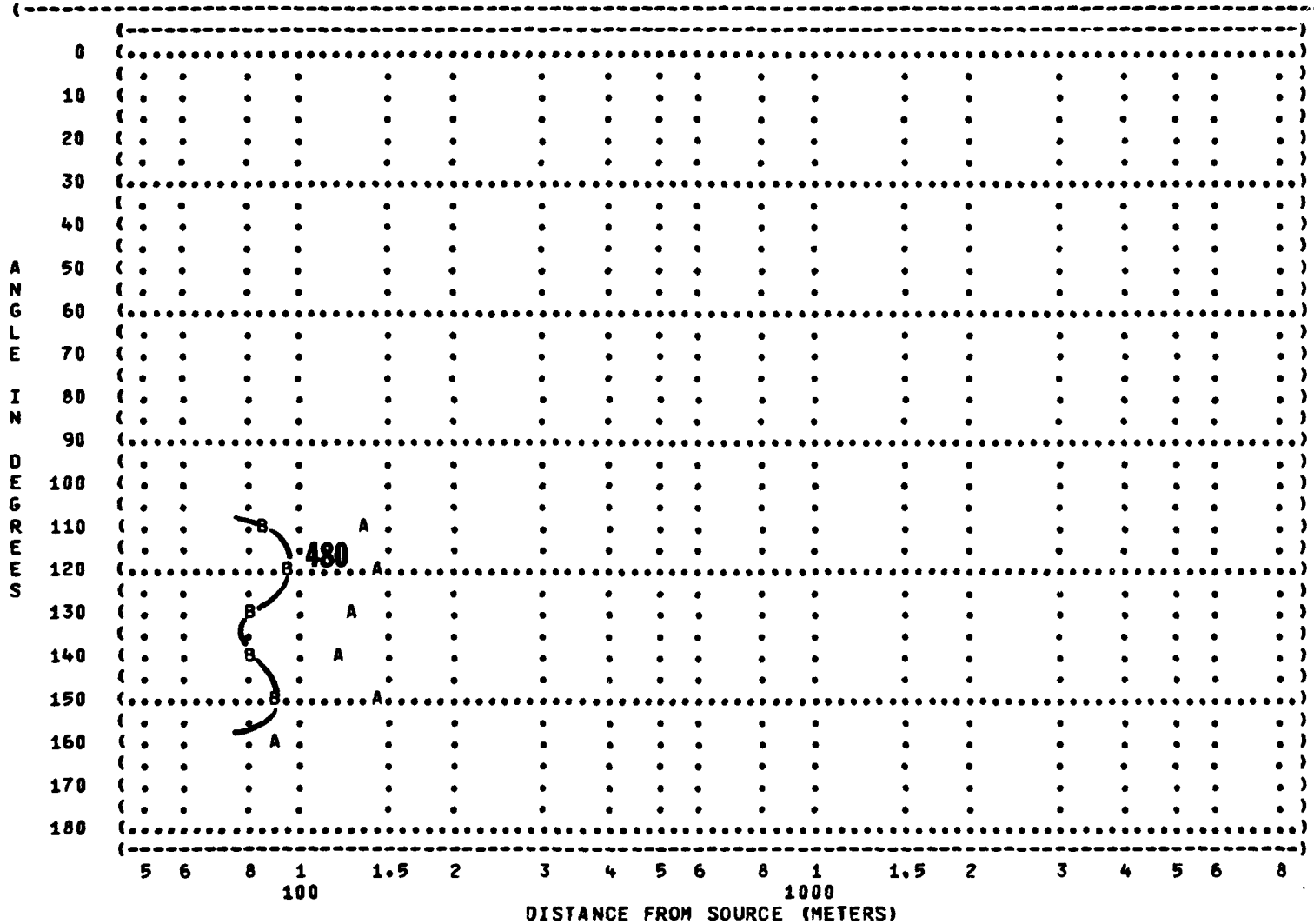


FIGURE 10: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
NO PROTECTION

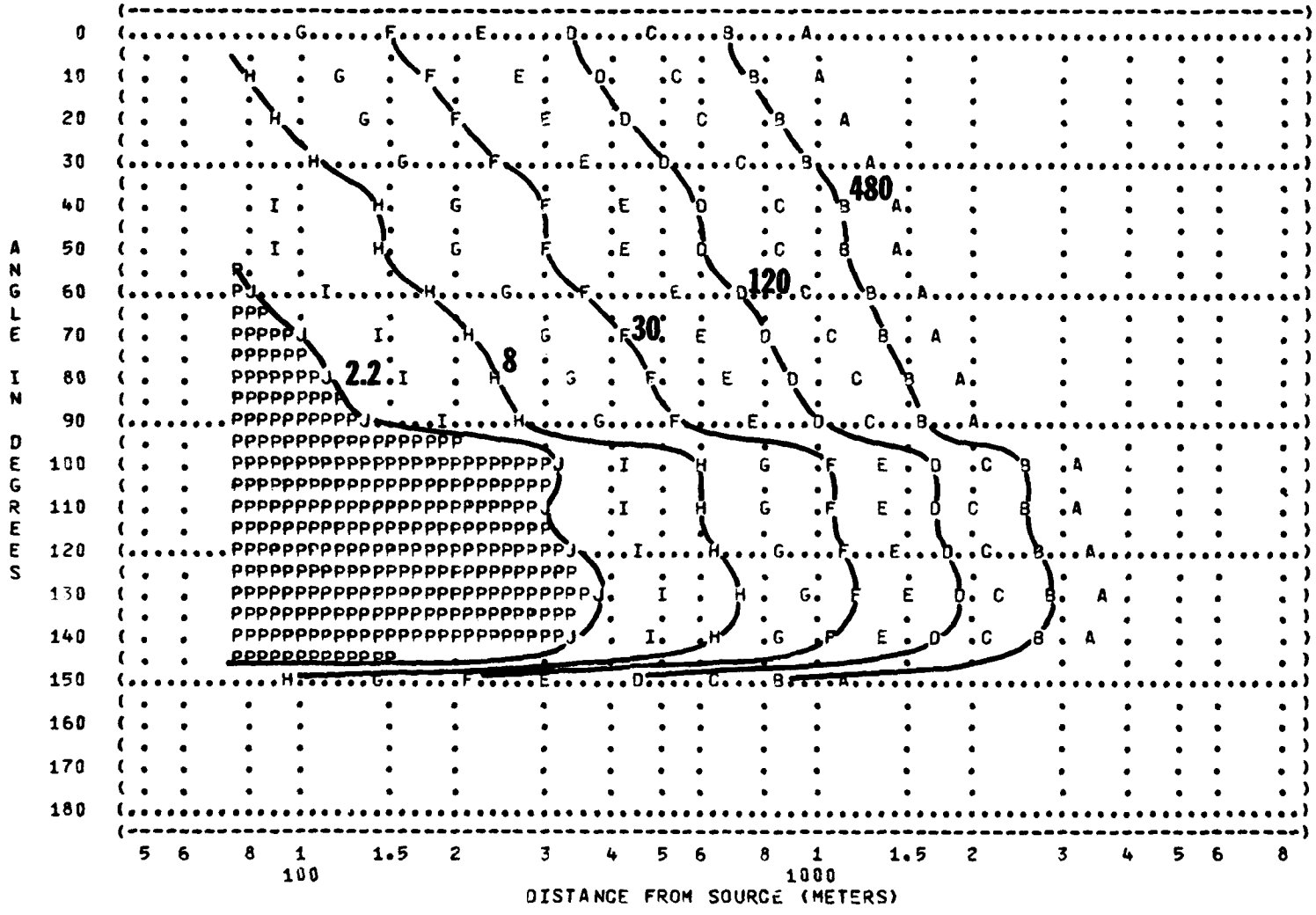
IDENTIFICATION:
OMEGA 1.4
TEST 75-002-059
RUN 03
09 AUG 76
PAGE 7

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
DEFLECTED FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	MIN
A	960
B	480
C	240
D	120
E	60
F	30
G	15
H	8
I	4
J	2.2



P ADDITIONAL EAR PROTECTION REQUIRED.

FIGURE: 10

MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
MINIMUM QPL EAR MUFFS

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
DEFLECTED FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-059
RUN 03
09 AUG 76
PAGE 8

POINT	MIN
A	960
B	480
C	240
D	120
E	60
F	30
G	15
H	8
I	4

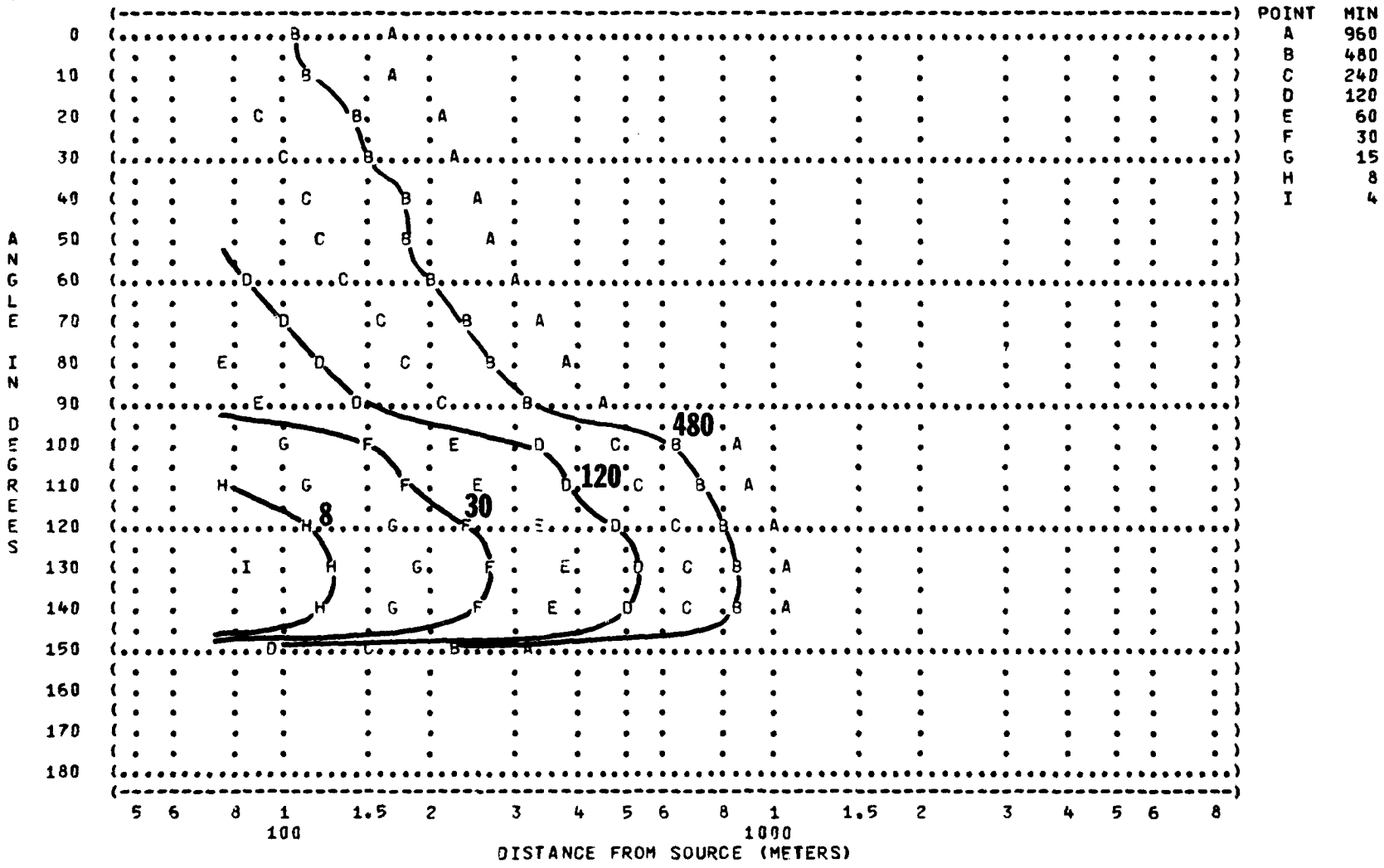


FIGURE: 10

MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
AMERICAN OPTICAL 1700 EAR MUFFS

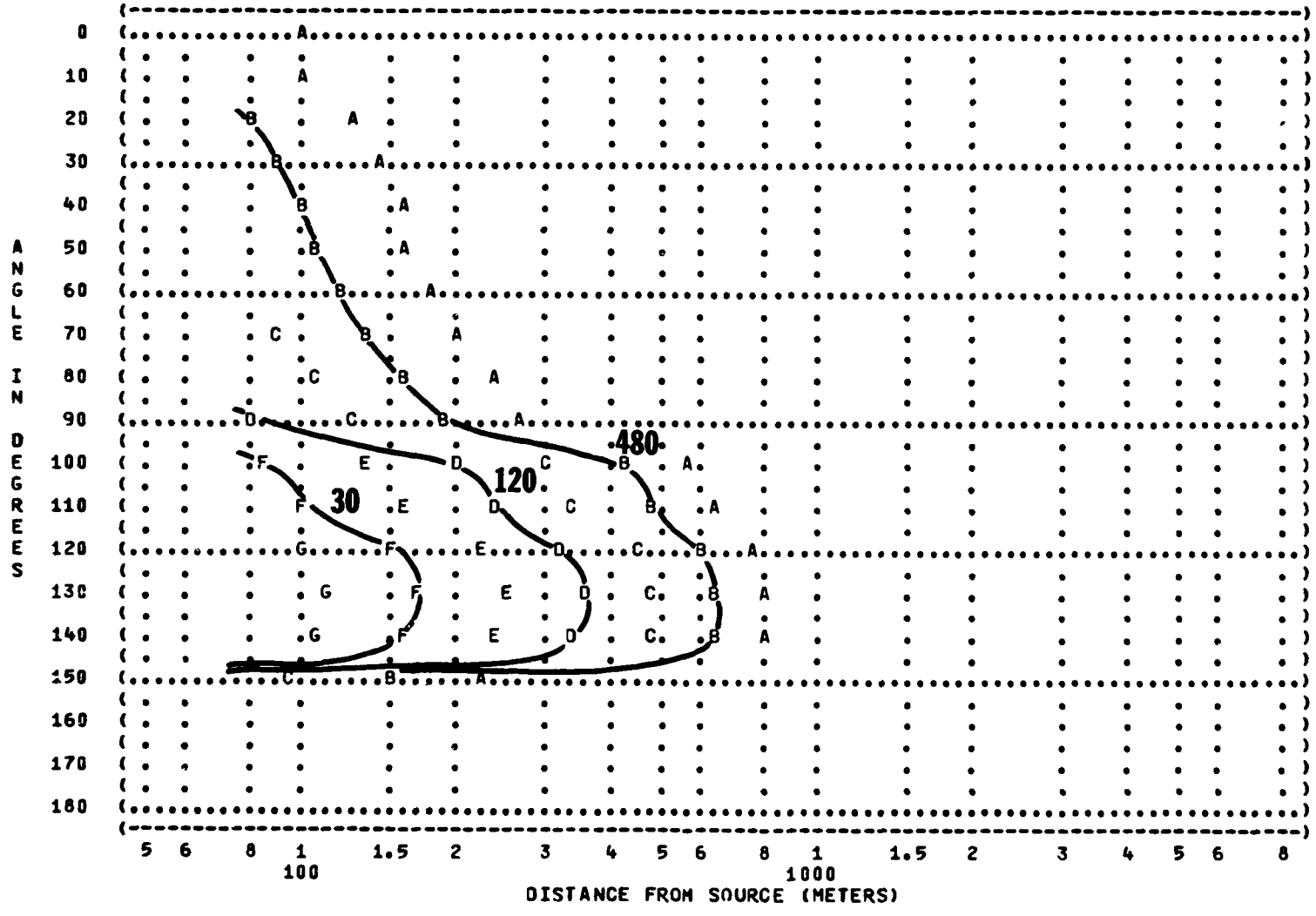
IDENTIFICATION:
OMEGA 1.4
TEST 75-002-059
RUN 03
09 AUG 76
PAGE 9

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
FAR FIELD NOISE

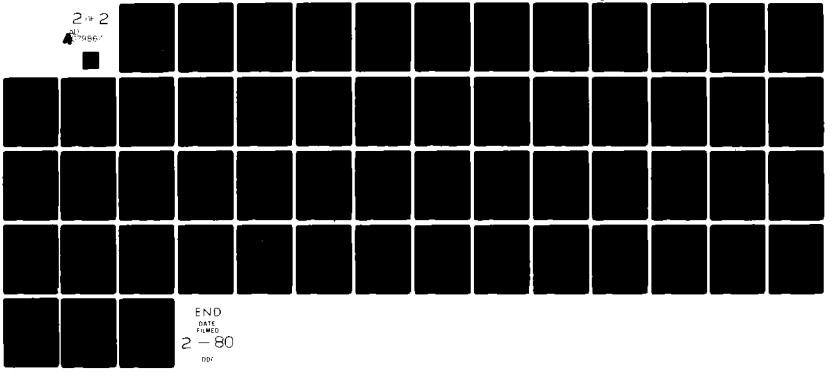
OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
DEFLECTED FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	MIN
A	960
B	480
C	240
D	120
E	60
F	30
G	15



AD-A079 867 AEROSPACE MEDICAL RESEARCH LAB WRIGHT-PATTERSON AFB OH F/G 1/3
USAF BIOENVIRONMENTAL NOISE DATA HANDBOOK, VOLUME 121, F-4C AIR--ETC(U)
APR 79 R G POWELL
UNCLASSIFIED AMRL-TR-75-50-VOL-121 NL



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DATE FILMED
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DDC

FIGURE: 10

MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
V-51R EAR PLUGS

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
DEFLECTED FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-059
RUN 03
09 AUG 76
PAGE 10

POINT	MIN
A	960
B	480
C	240
D	120
E	60
F	30
G	15

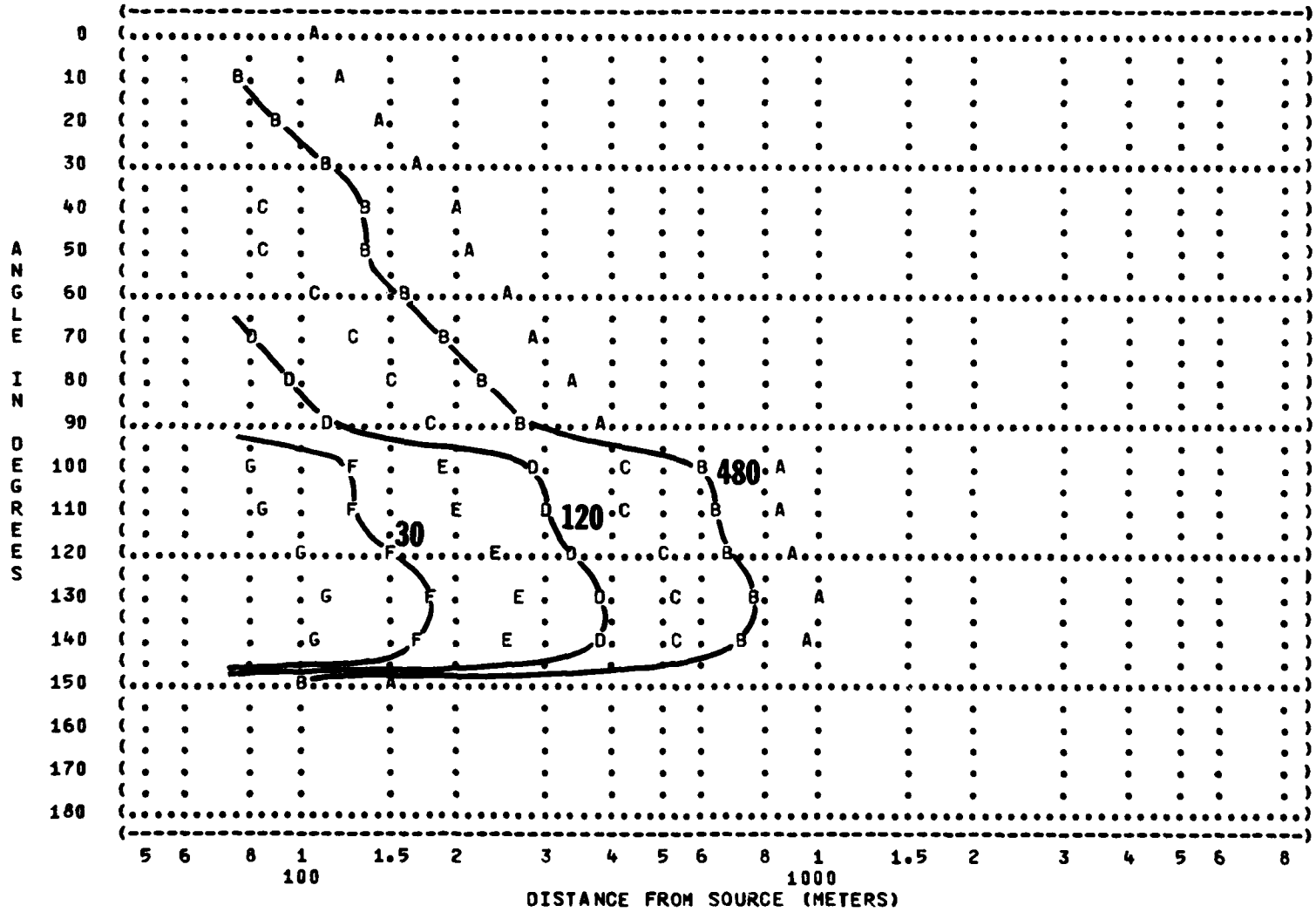


FIGURE: 10

MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
COMFIT TRIPLE FLANGE EAR PLUGS

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
DEFLECTED FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-059
RUN 03
09 AUG 76
PAGE 11

POINT	MIN
A	960
B	480
C	240
D	120
E	60
F	30
G	15
H	8

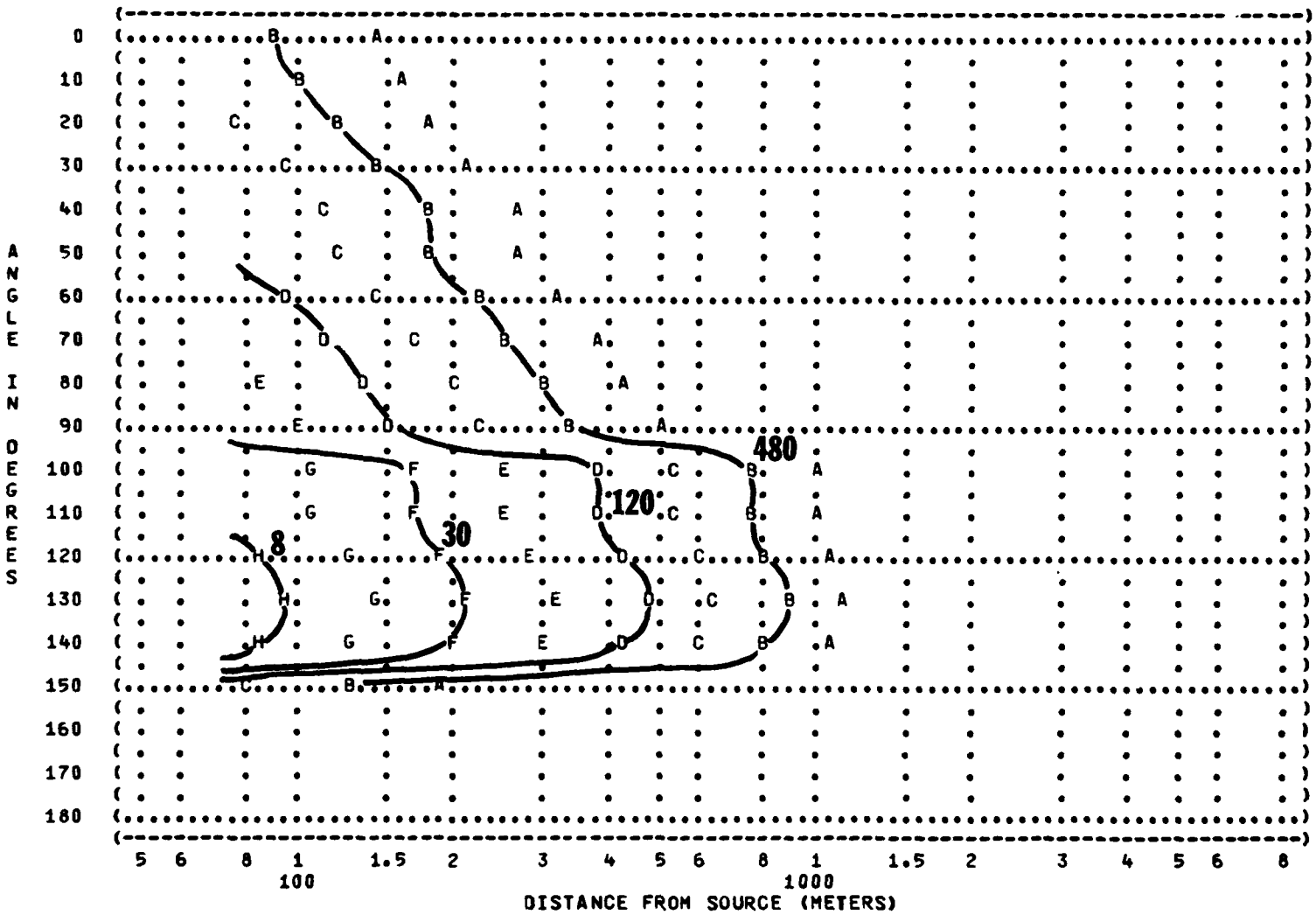


FIGURE: 10

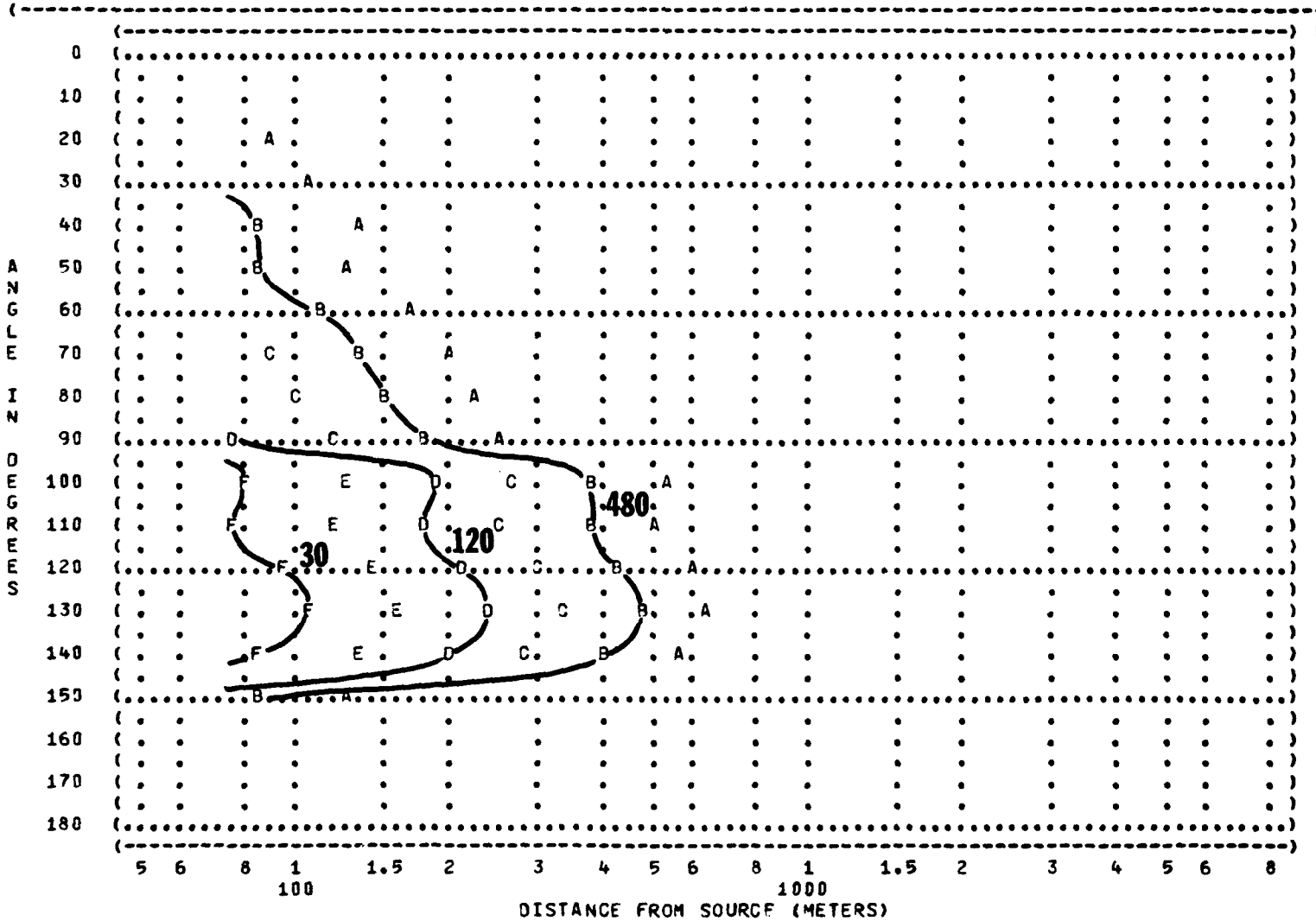
MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
H-133 GROUND COMMUNICATION UNIT

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100.. RPM
SINGLE ENGINE
DEFLECTED FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-059
RUN 03
09 AUG 76
PAGE 12



POINT	MIN
A	960
B	480
C	240
D	120
E	60
F	30

FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 31.5 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 01
02 AUG 76
PAGE 15

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85

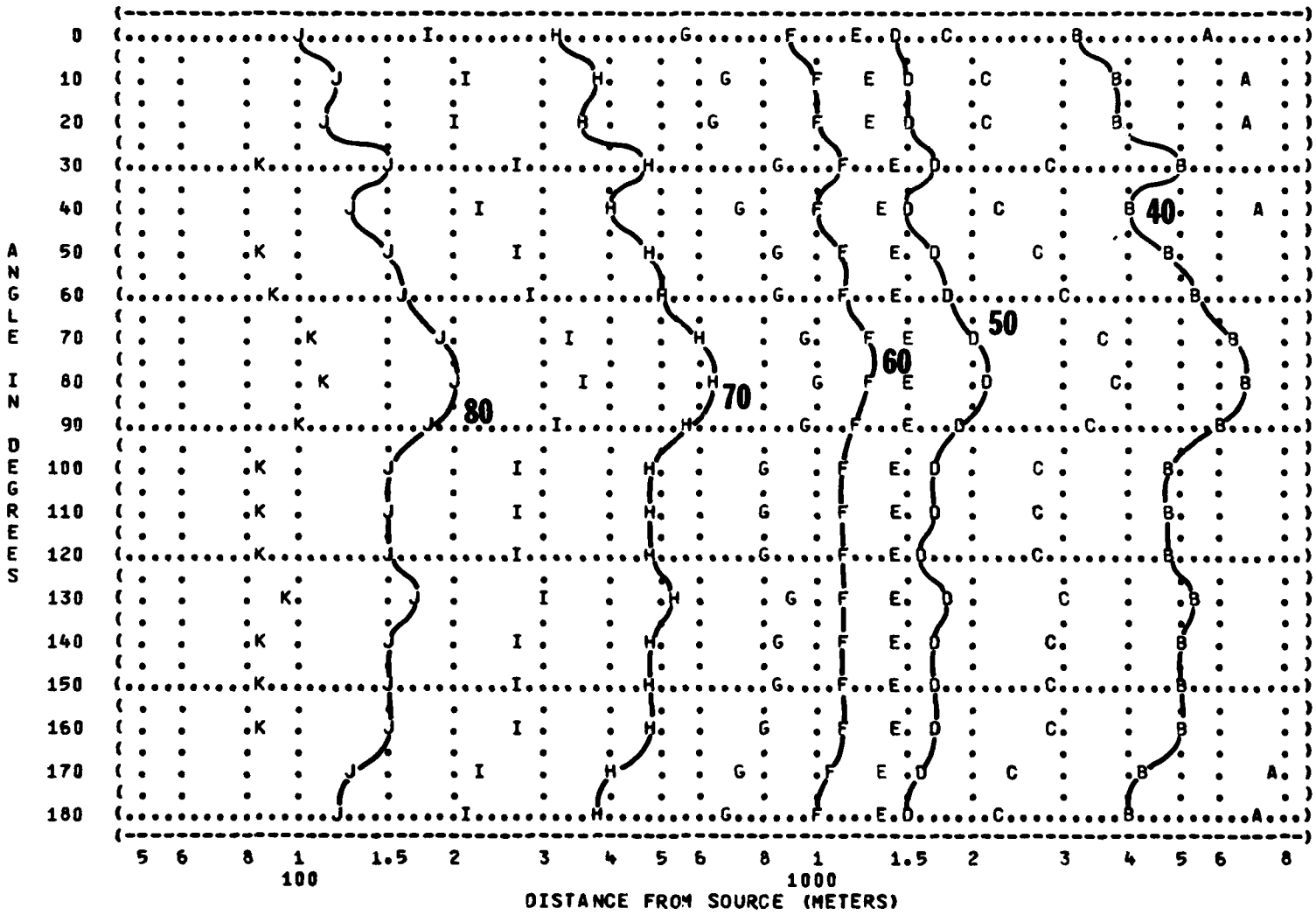


FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 63 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 01
02 AUG 76
PAGE 19

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80

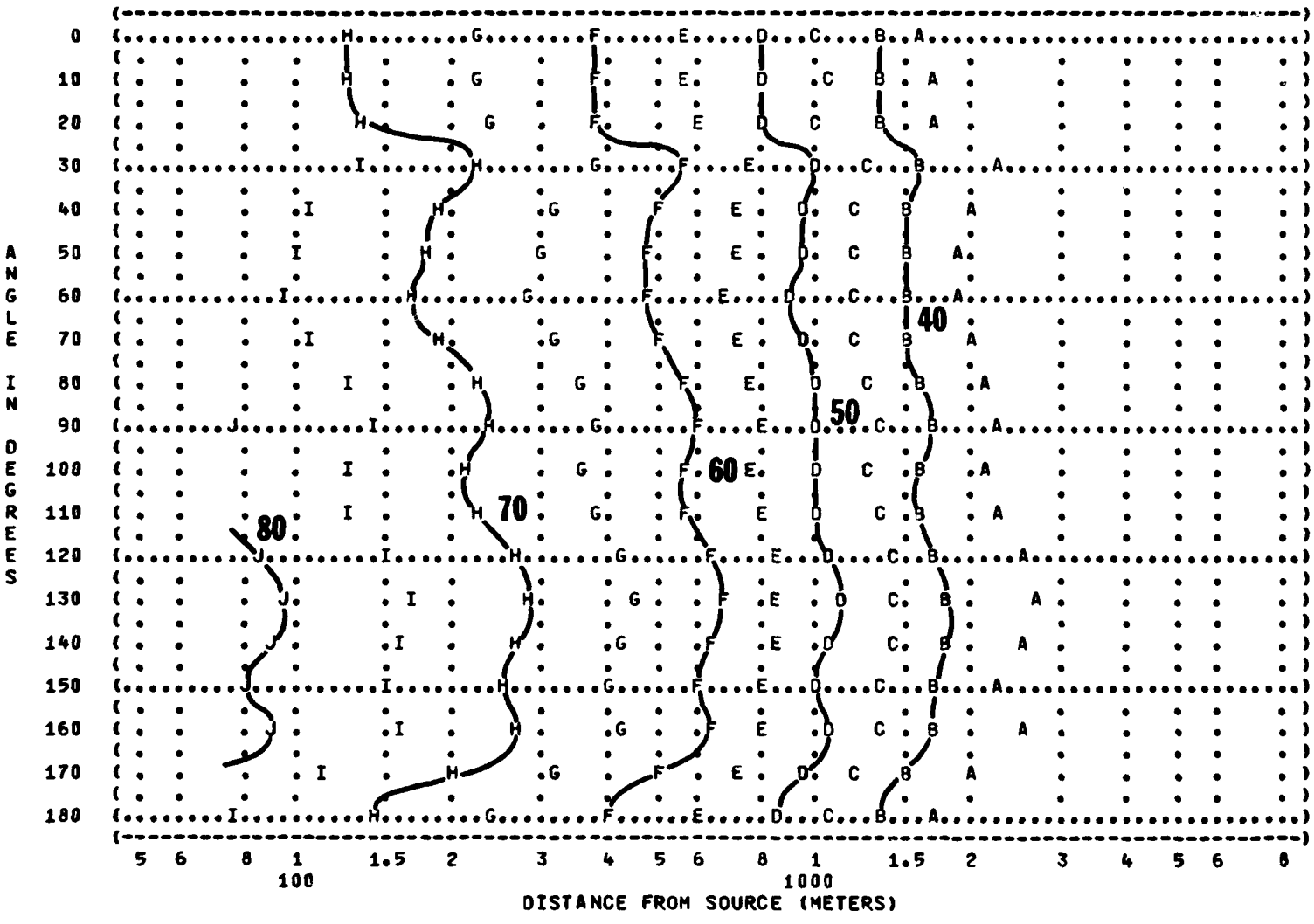


FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (OB) 125 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 01
02 AUG 76
PAGE 20

POINT	OB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80

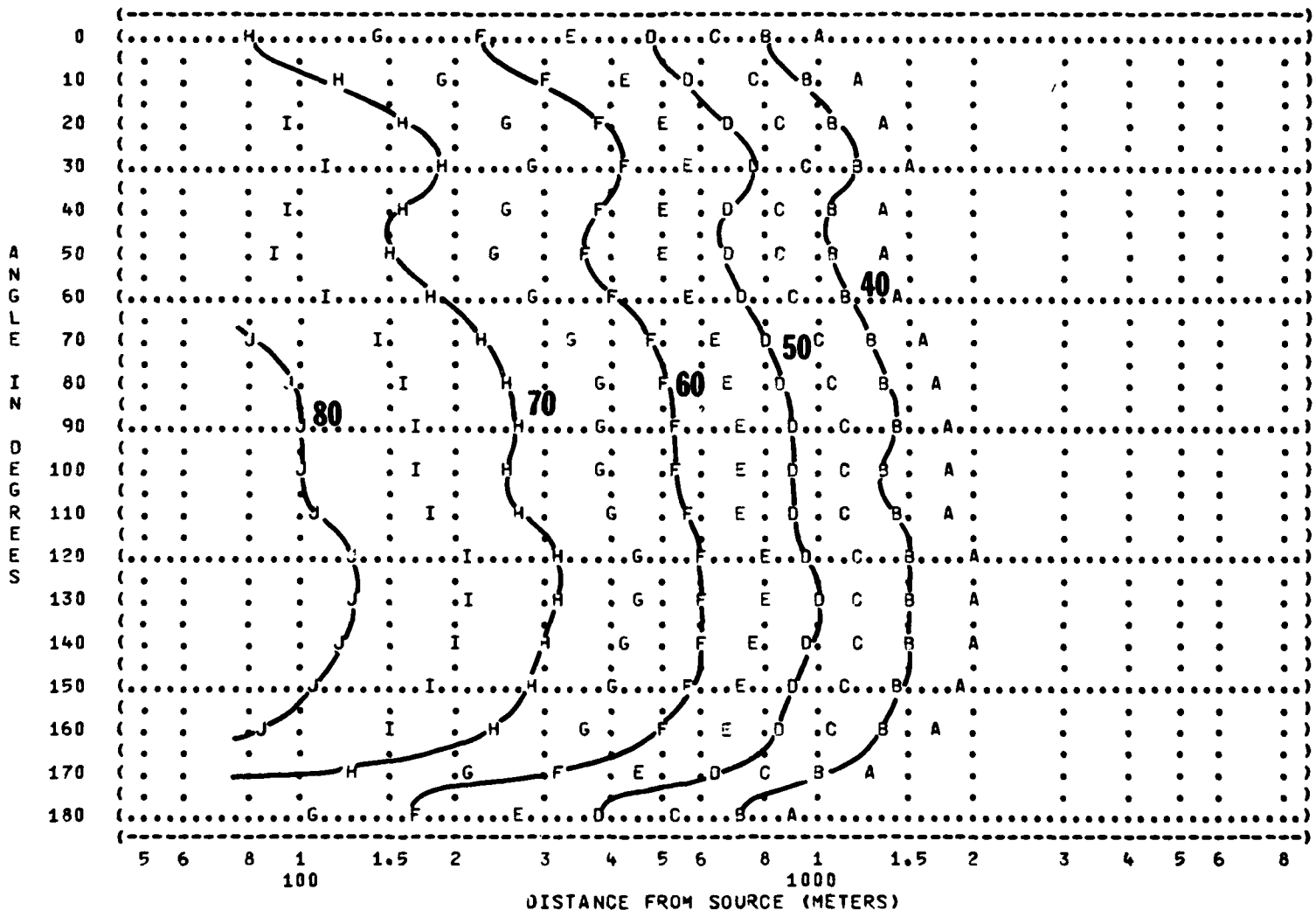


FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 250 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 01
02 AUG 76
PAGE 21

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75

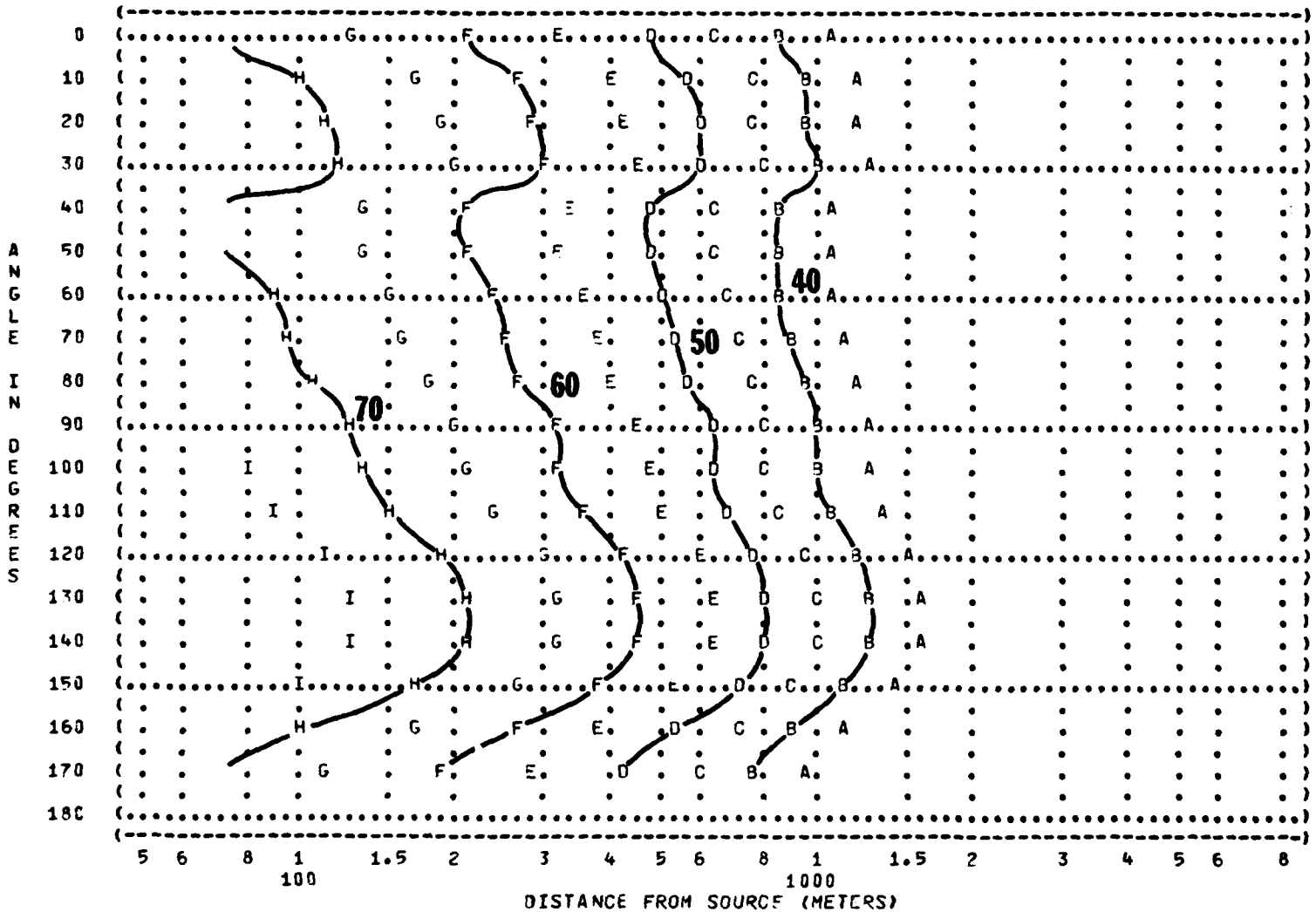


FIGURE: 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 500 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 01
02 AUG 76
PAGE 22

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80

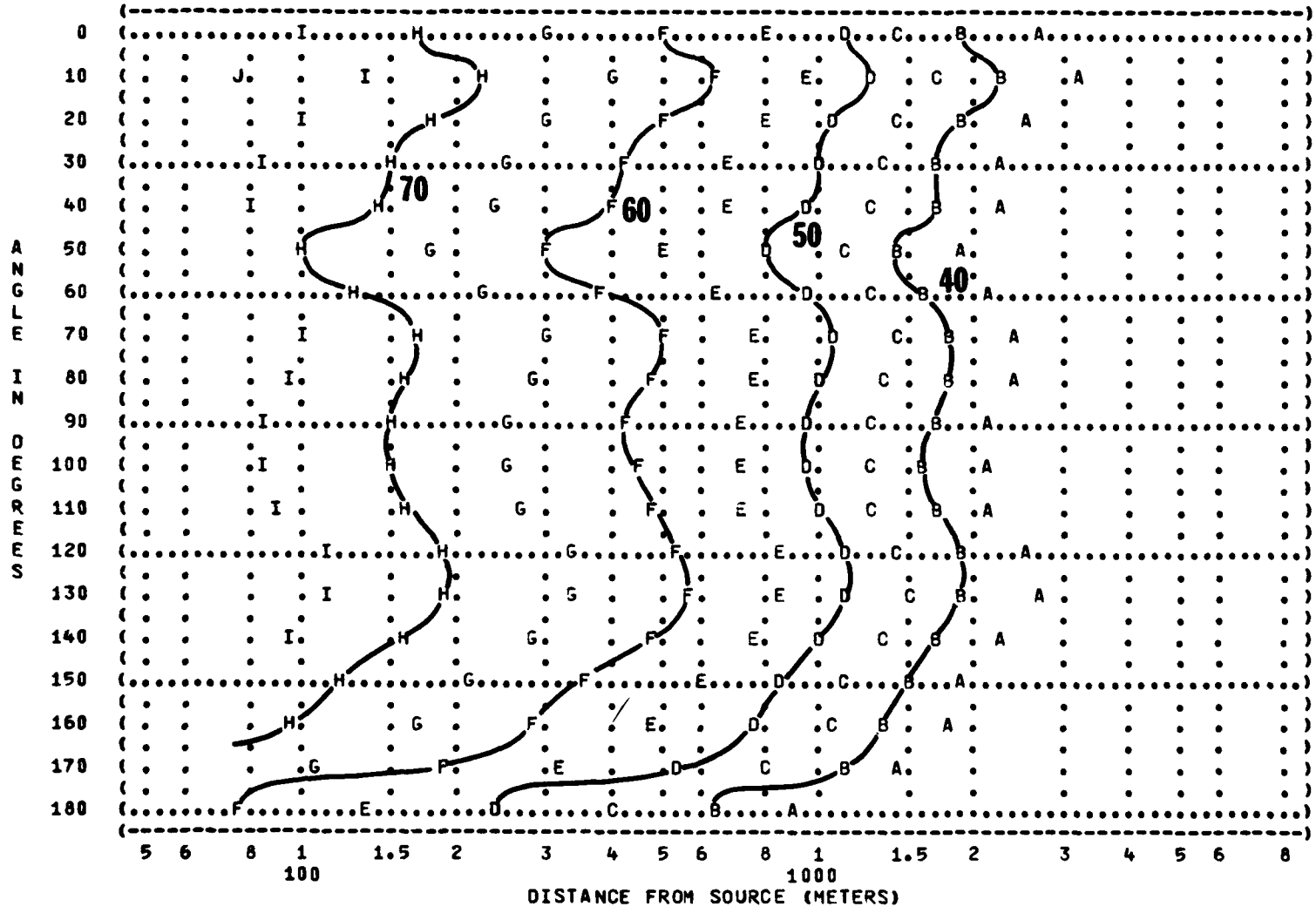


FIGURE: 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 1000 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 01
02 AUG 76
PAGE 23

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75

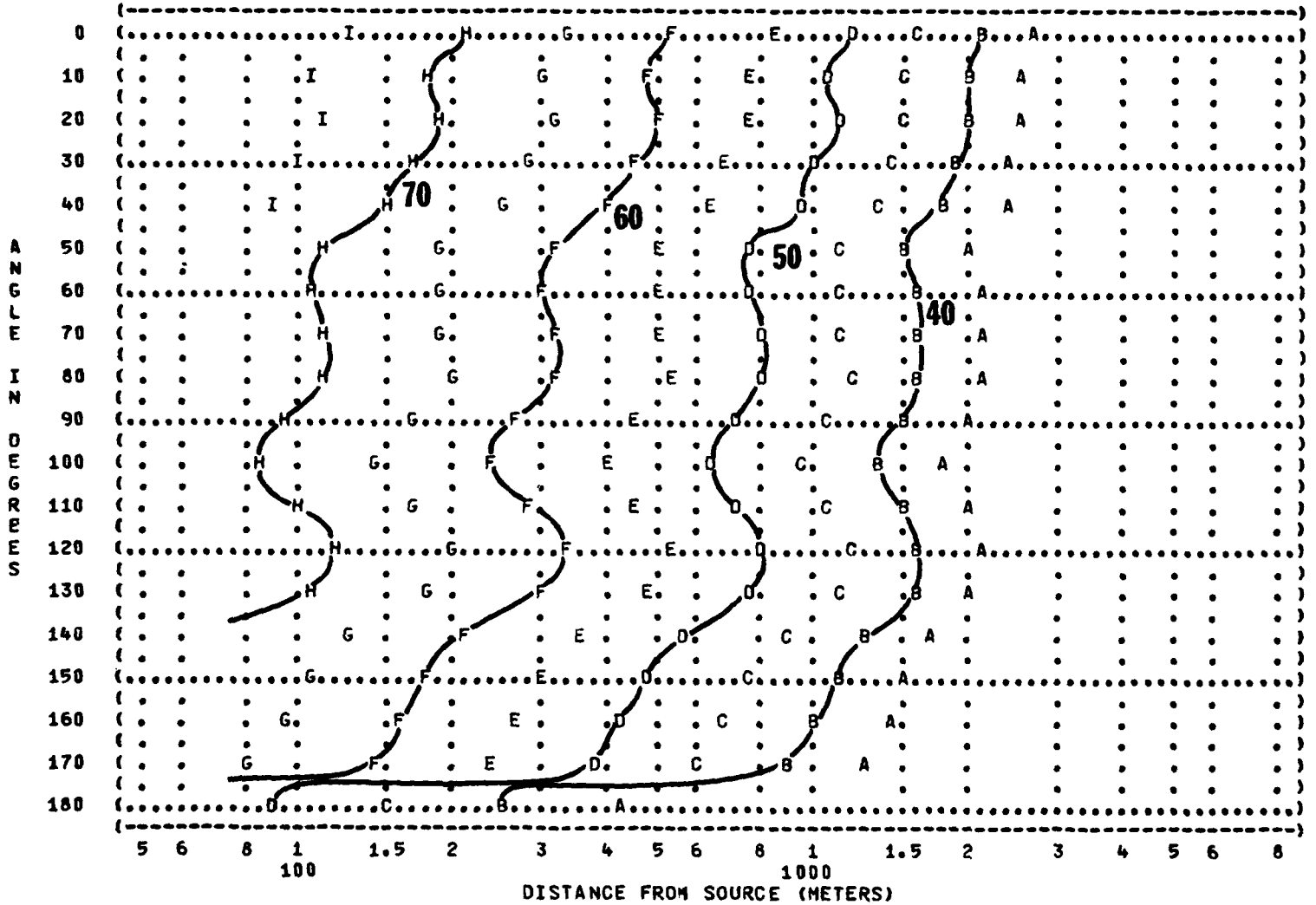


FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 2000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 01
02 AUG 76
PAGE 24

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90

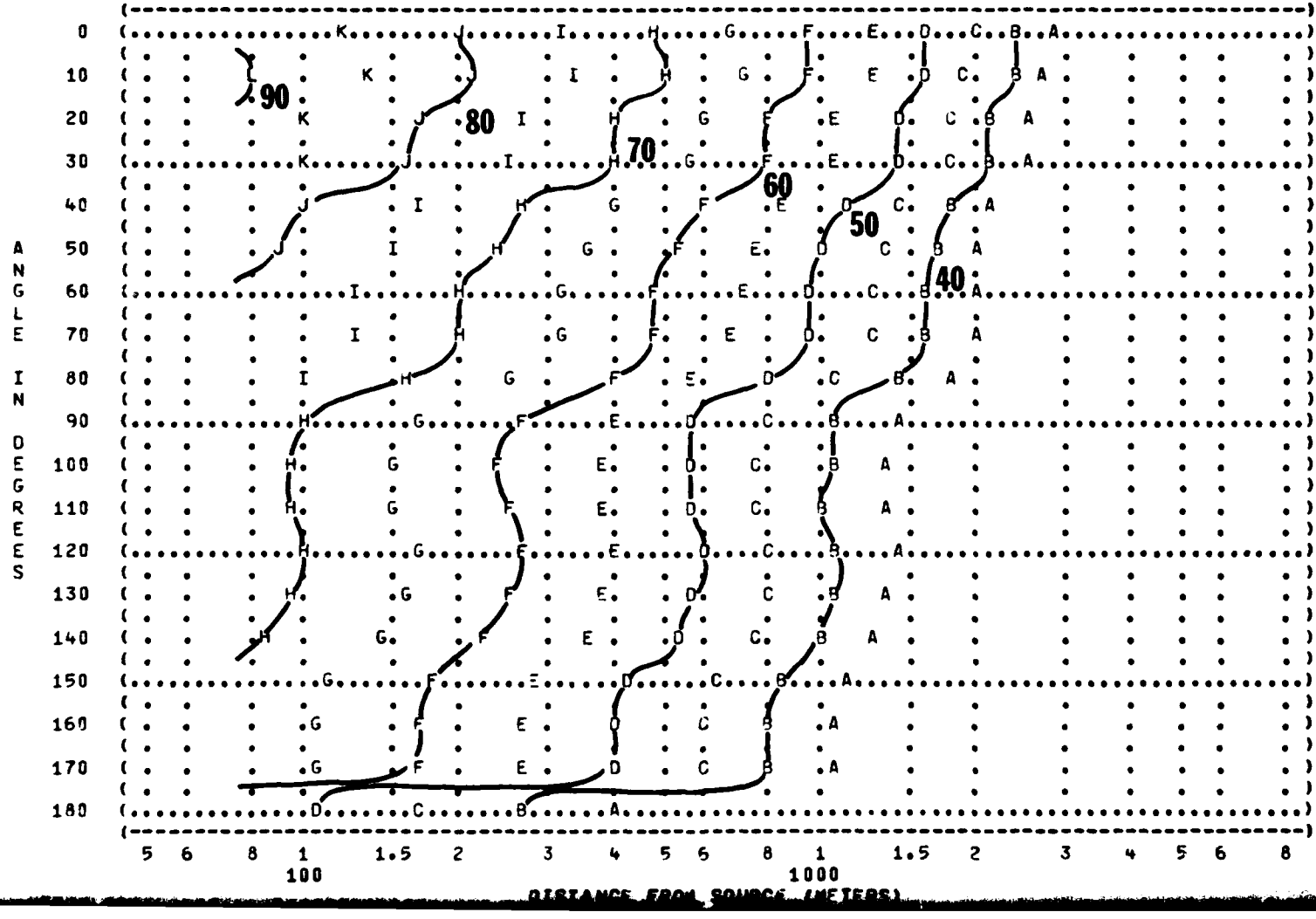


FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 4000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
85% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 01
02 AUG 76
PAGE 25

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80

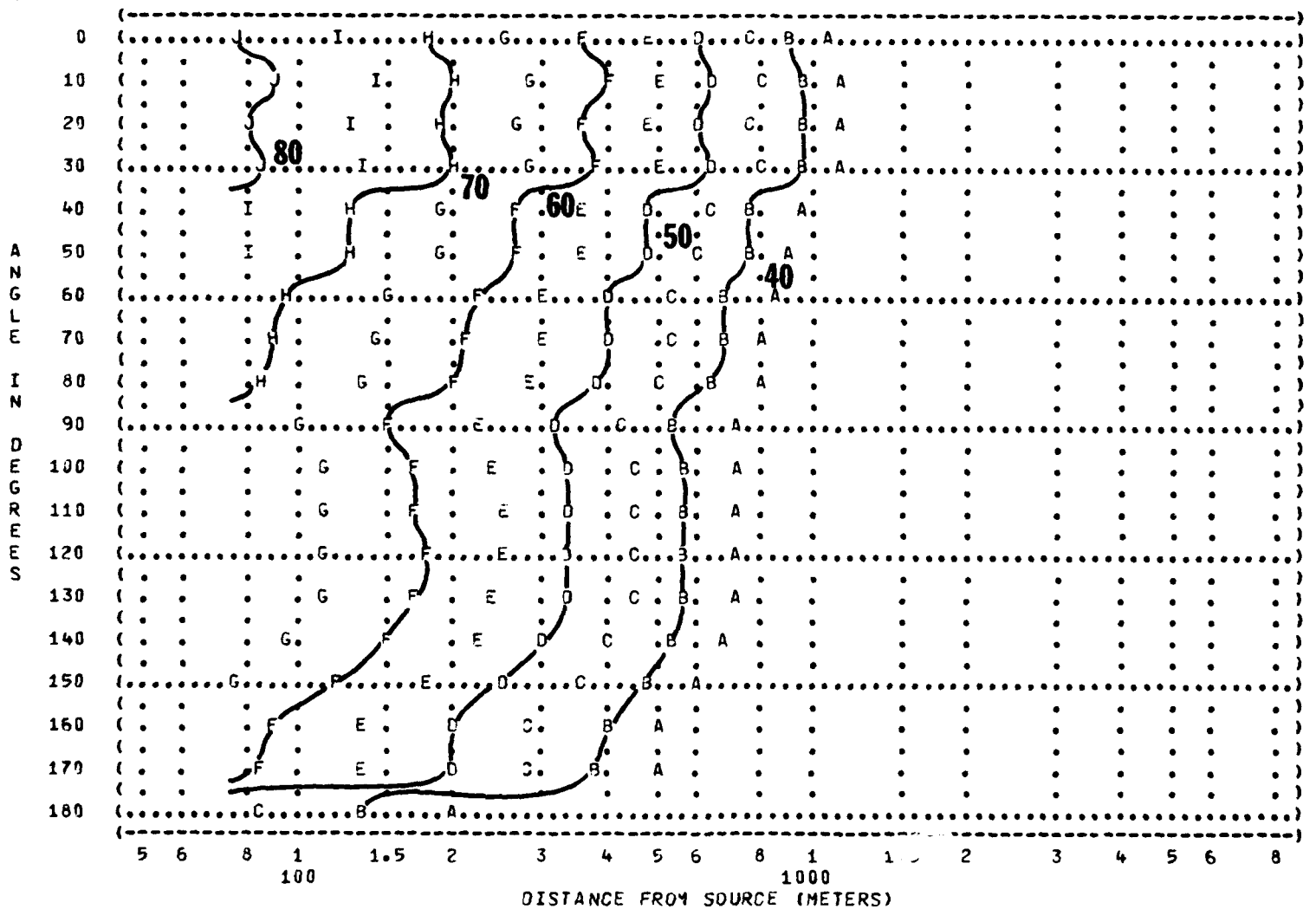


FIGURE 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 8000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 01
02 AUG 76
PAGE 26

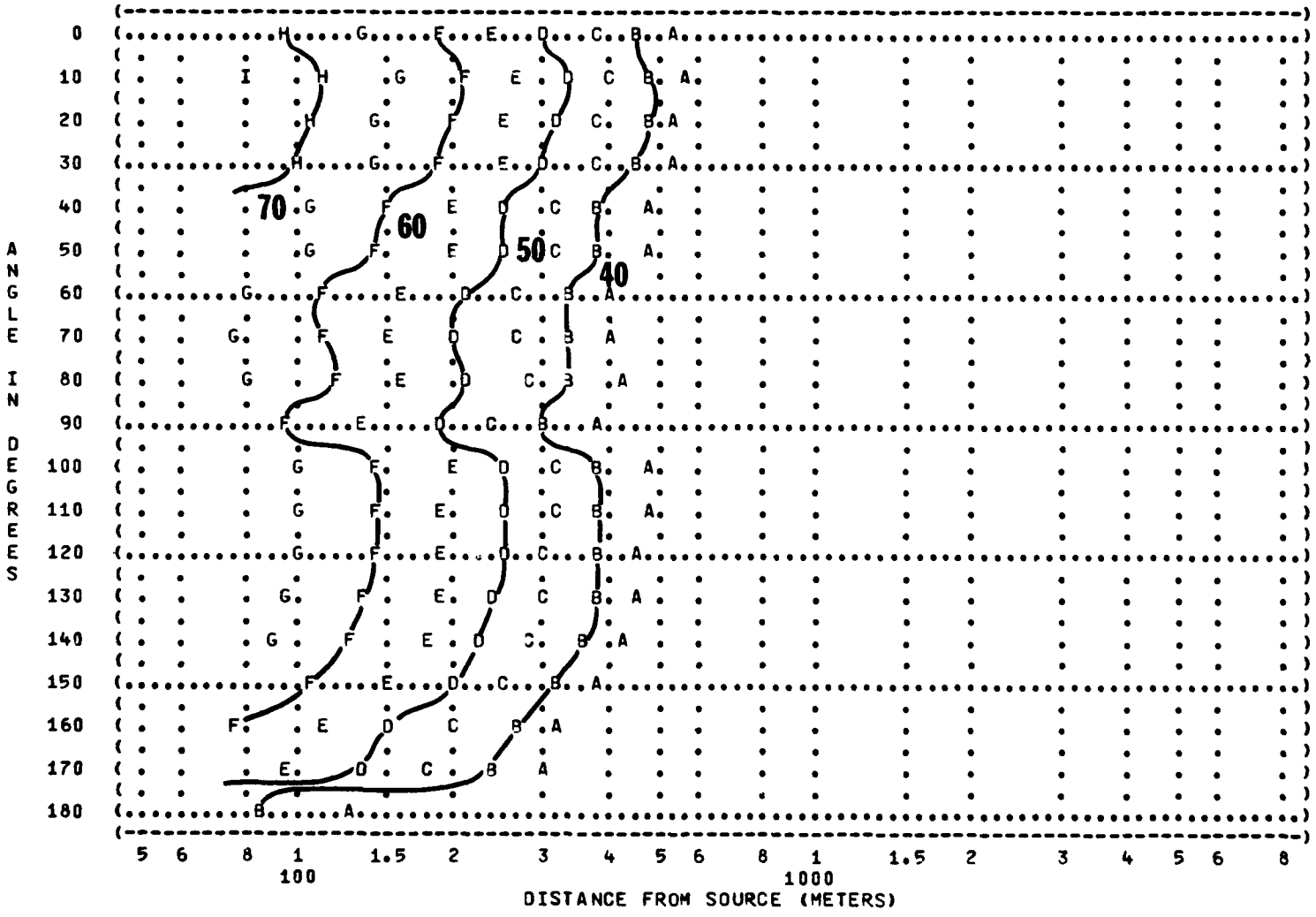


FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 31.5 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 02
02 AUG 76
PAGE 18

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95

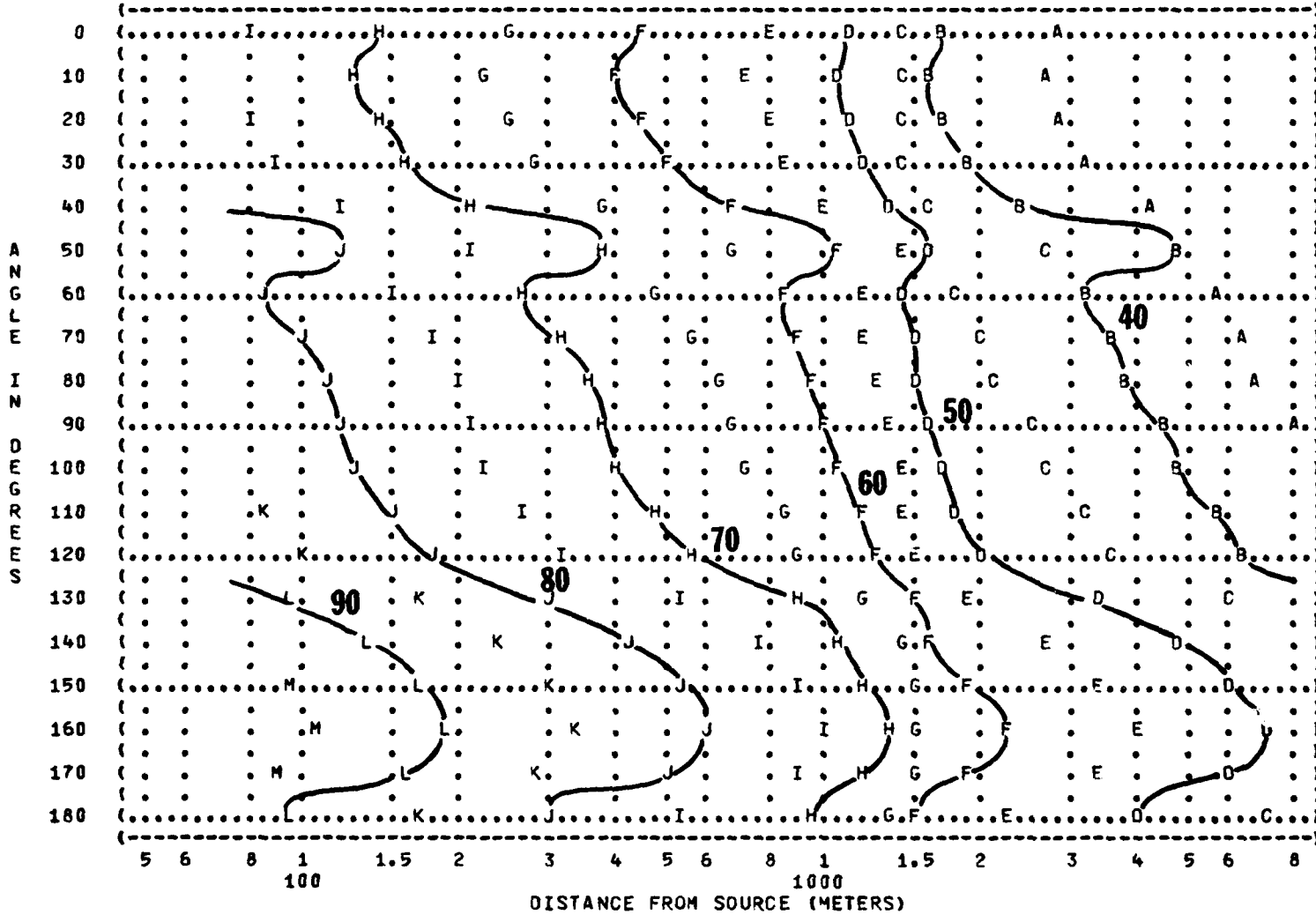


FIGURE: 11

SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
63 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 02
02 AUG 76
PAGE 19

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105

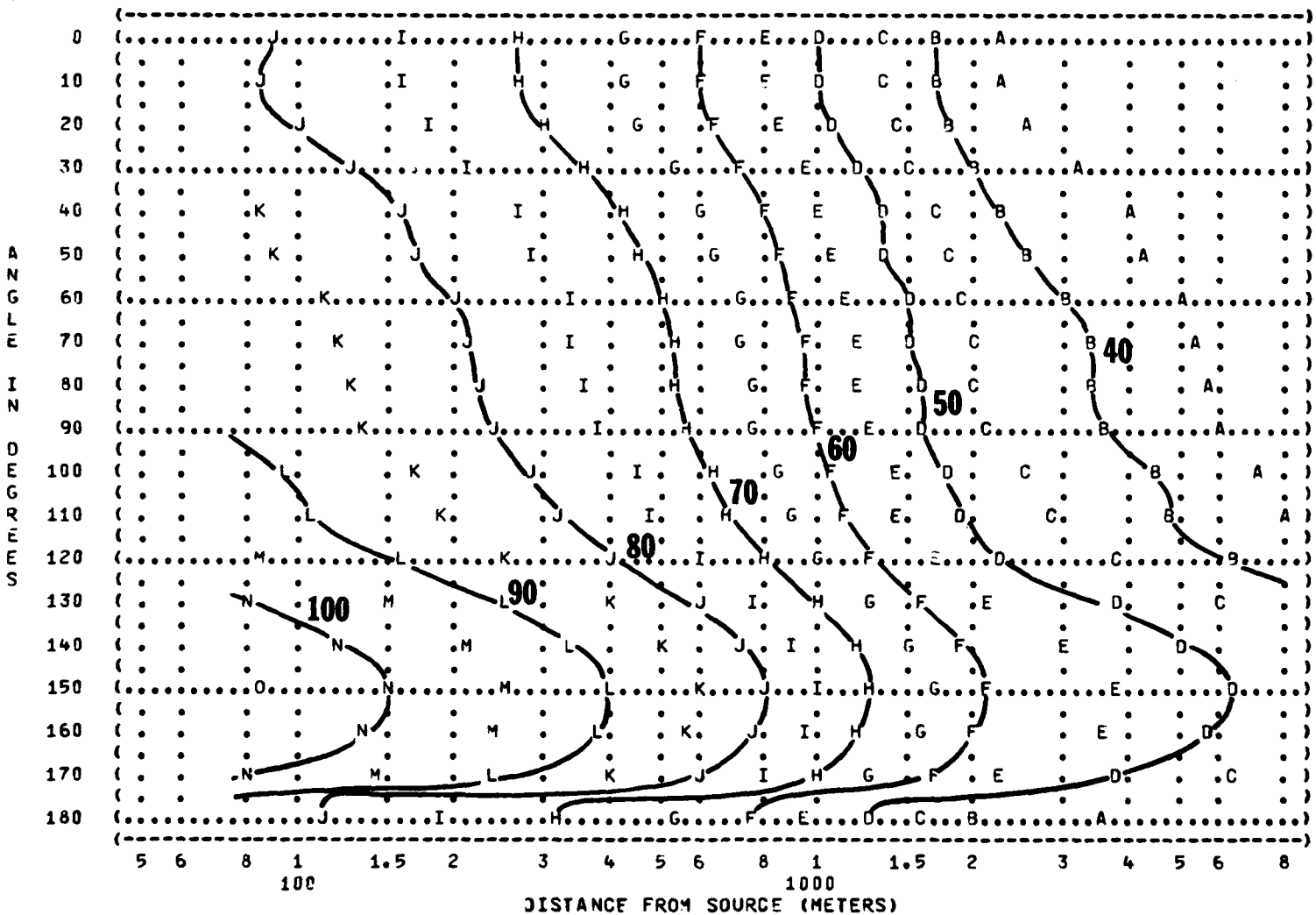


FIGURE: 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 125 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 02
02 AUG 76
PAGE 20

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110

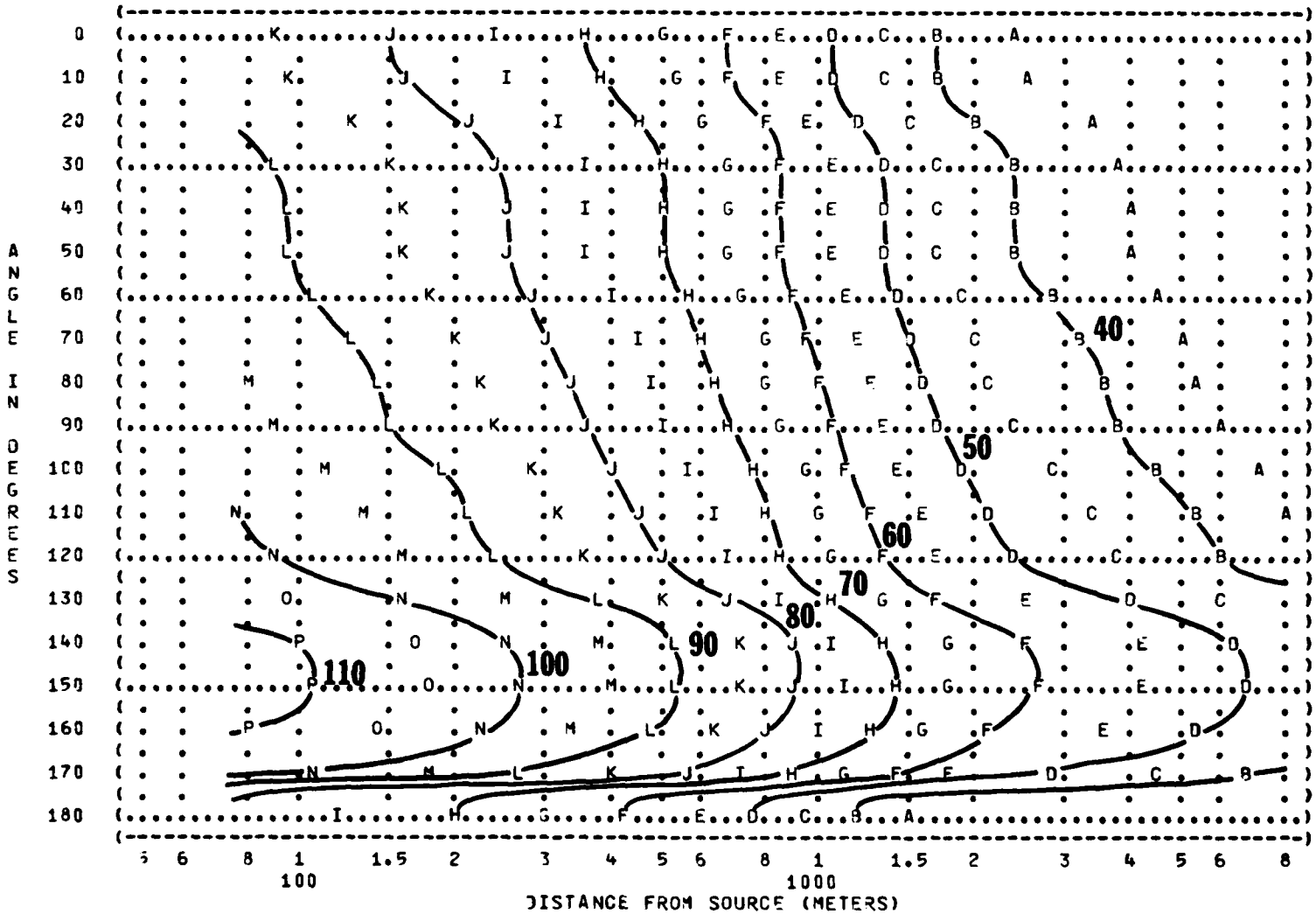


FIGURE: 11

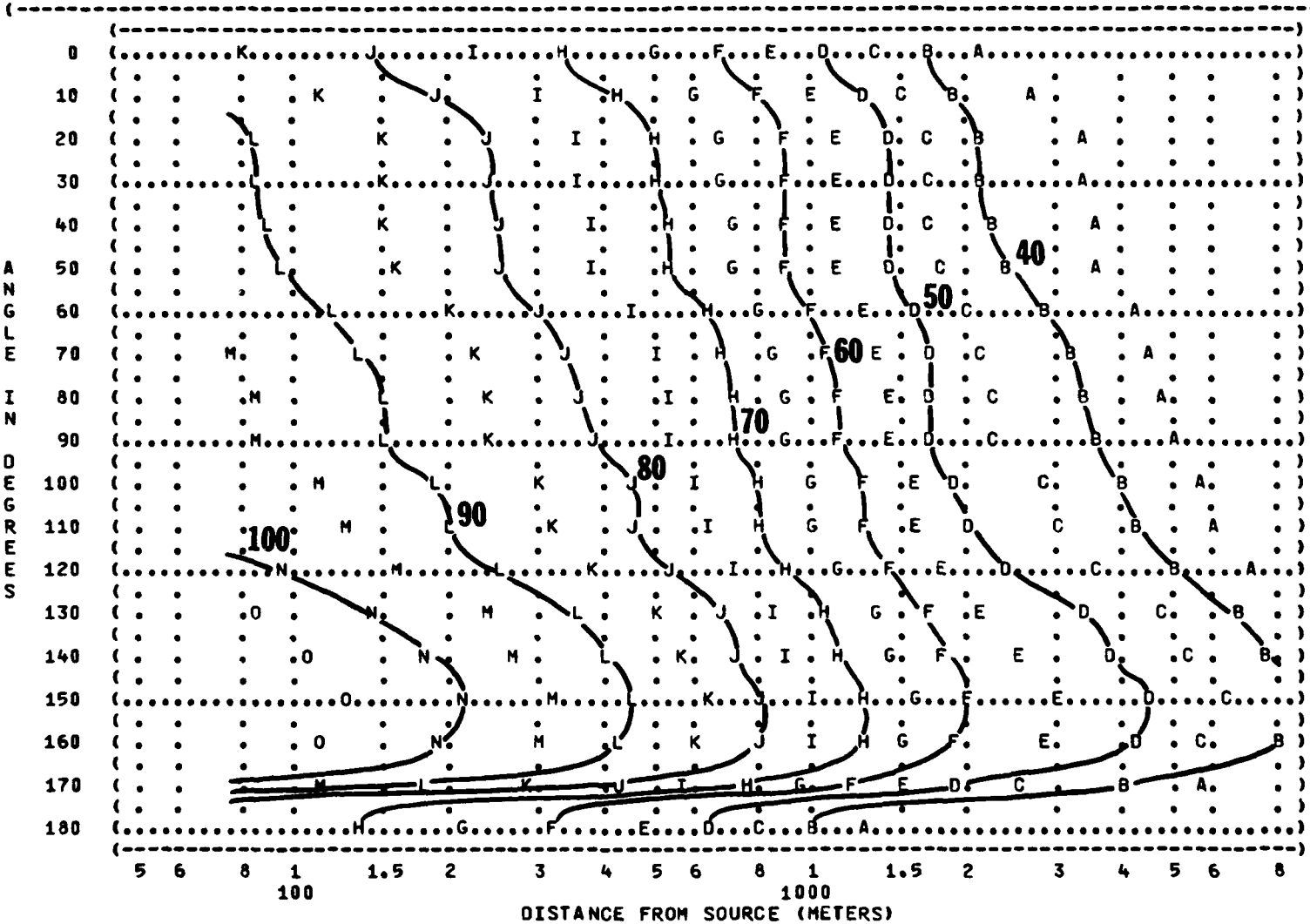
SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
250 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 02
02 AUG 76
PAGE 21

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105

FIGURE: 11

SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
500 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 02
02 AUG 76
PAGE 22

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105

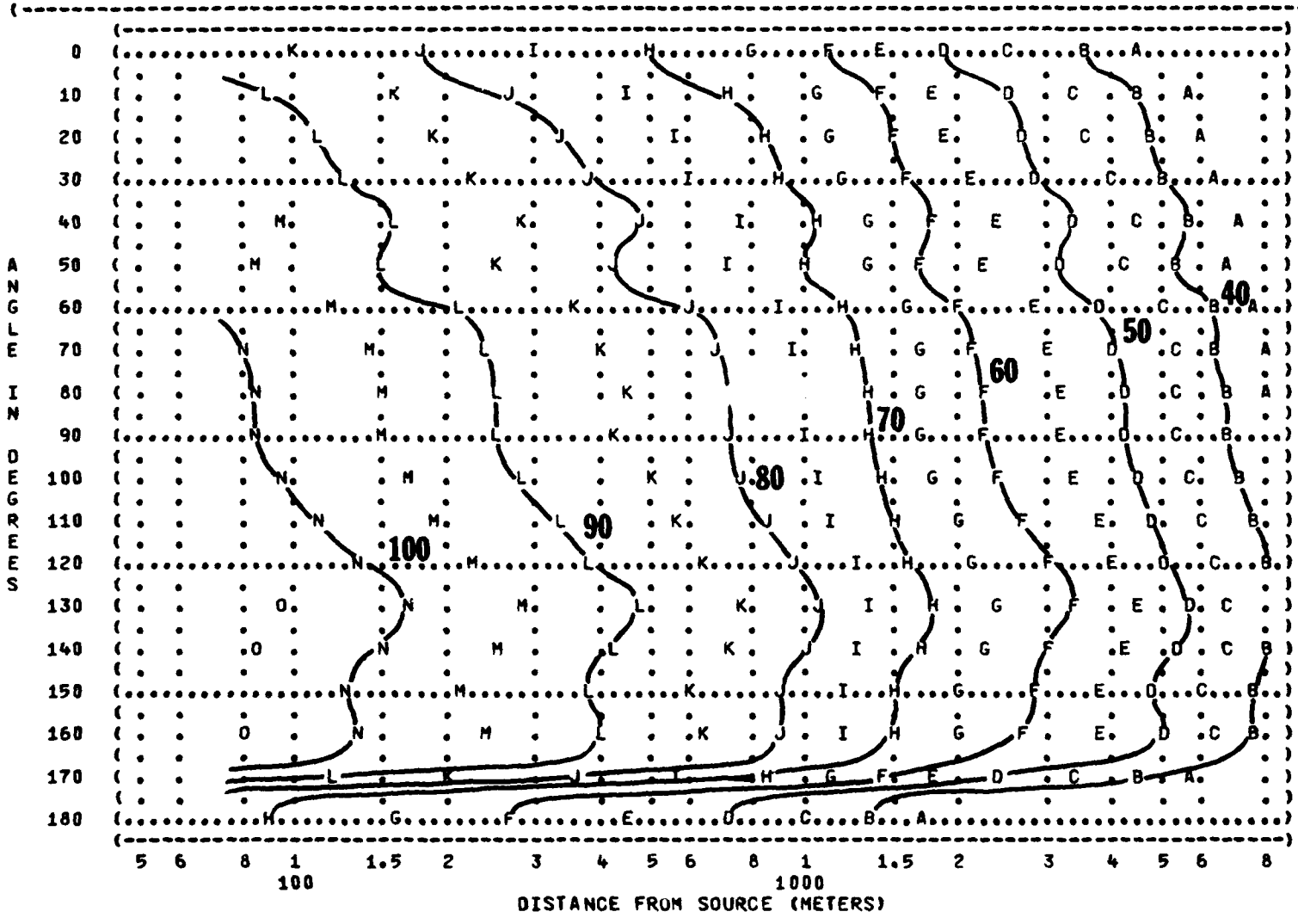


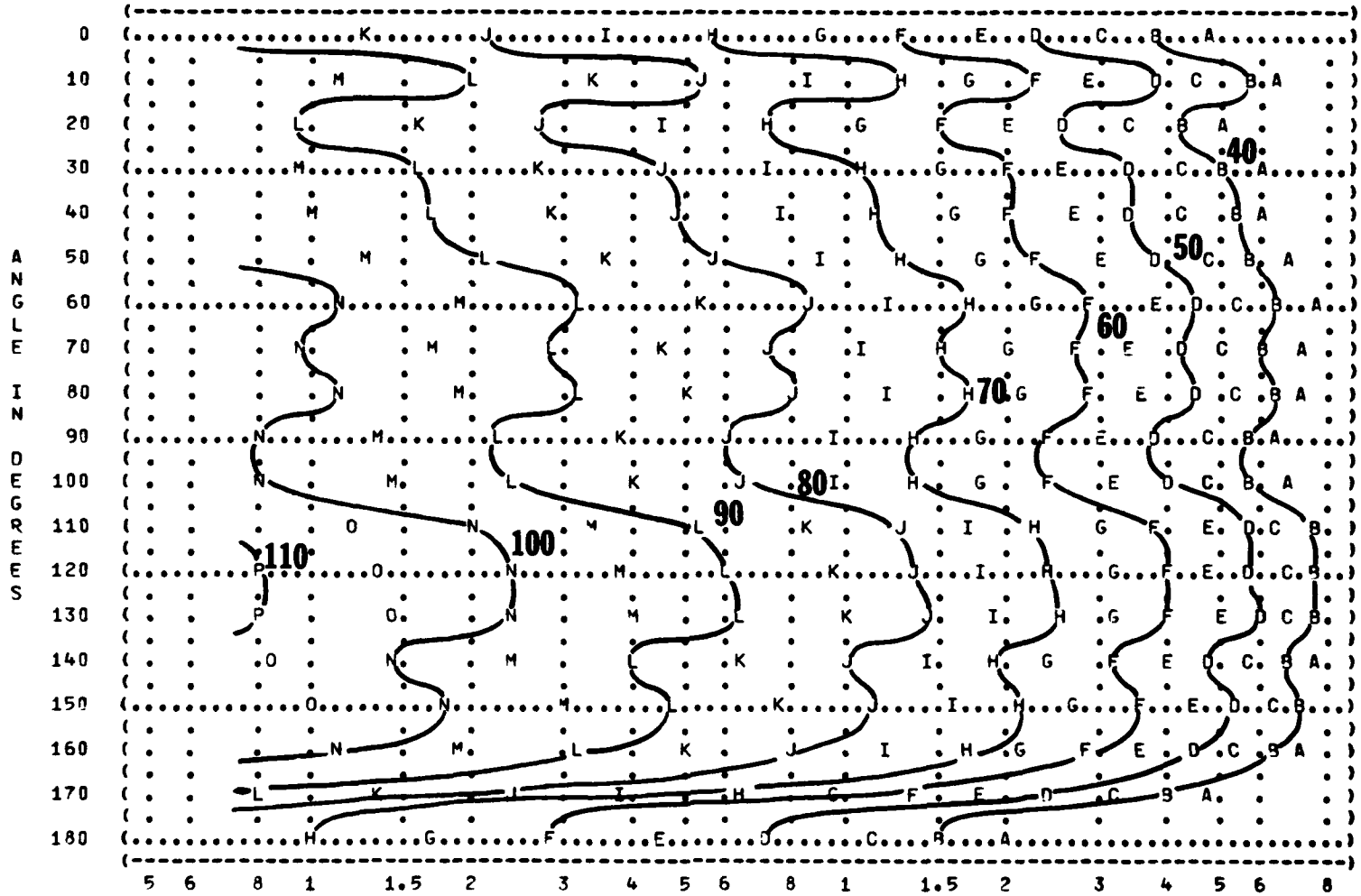
FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 1000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 02
02 AUG 76
PAGE 23



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110

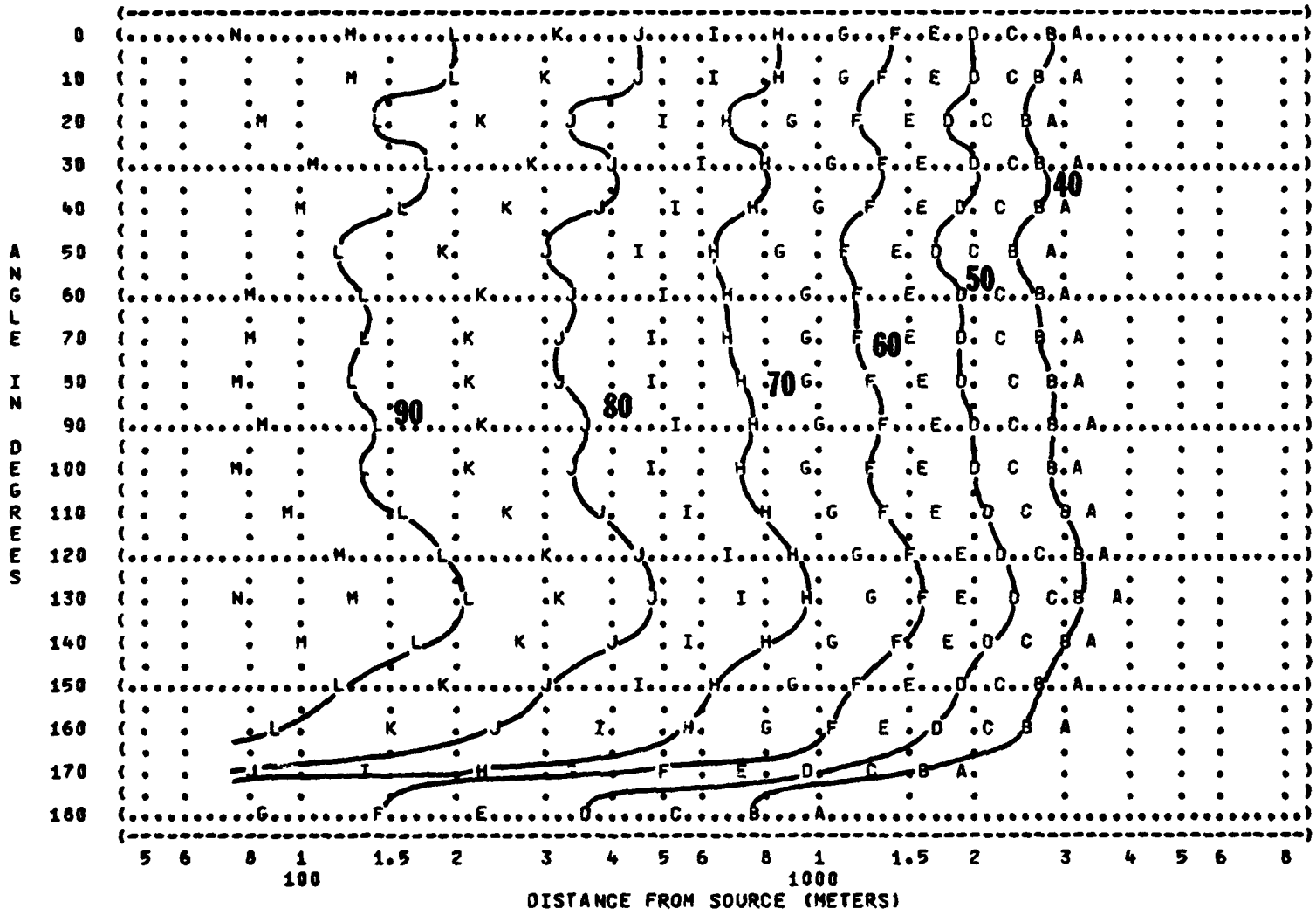
FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 2000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 02
02 AUG 76
PAGE 24



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100

FIGURE: 11

SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
4000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 02
02 AUG 76
PAGE 25

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90

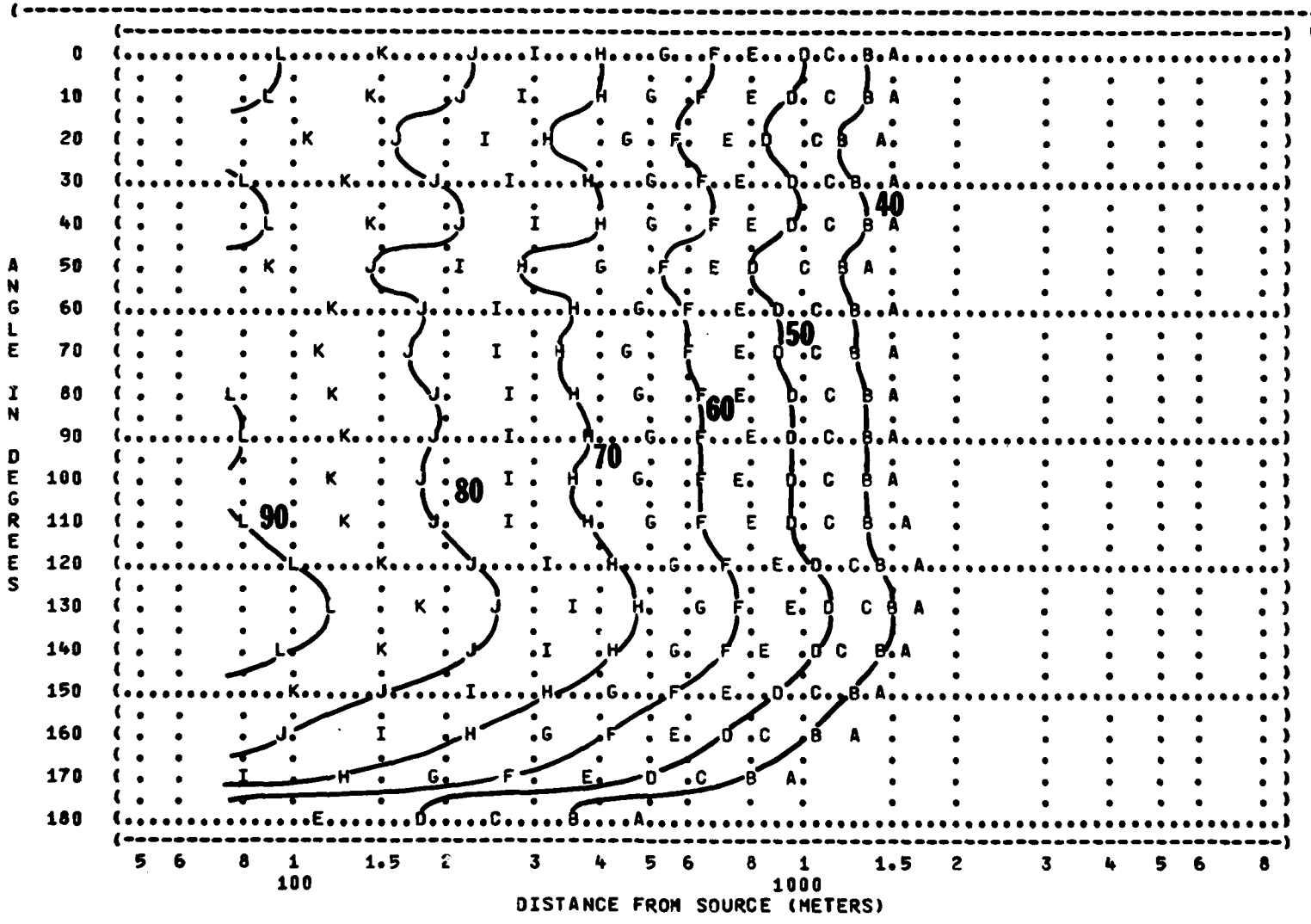


FIGURE: 11

SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
8000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 02
02 AUG 76
PAGE 26

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85

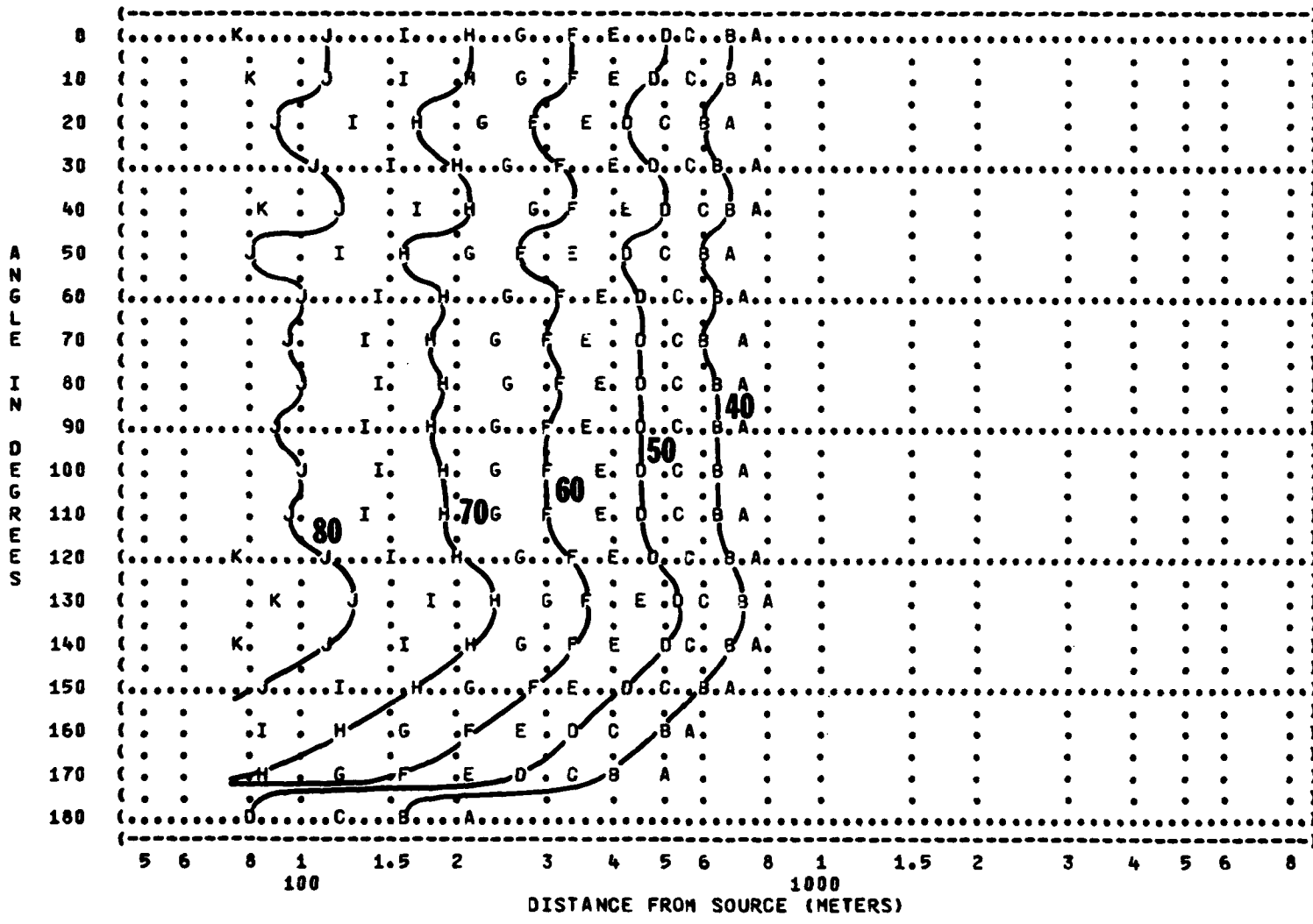


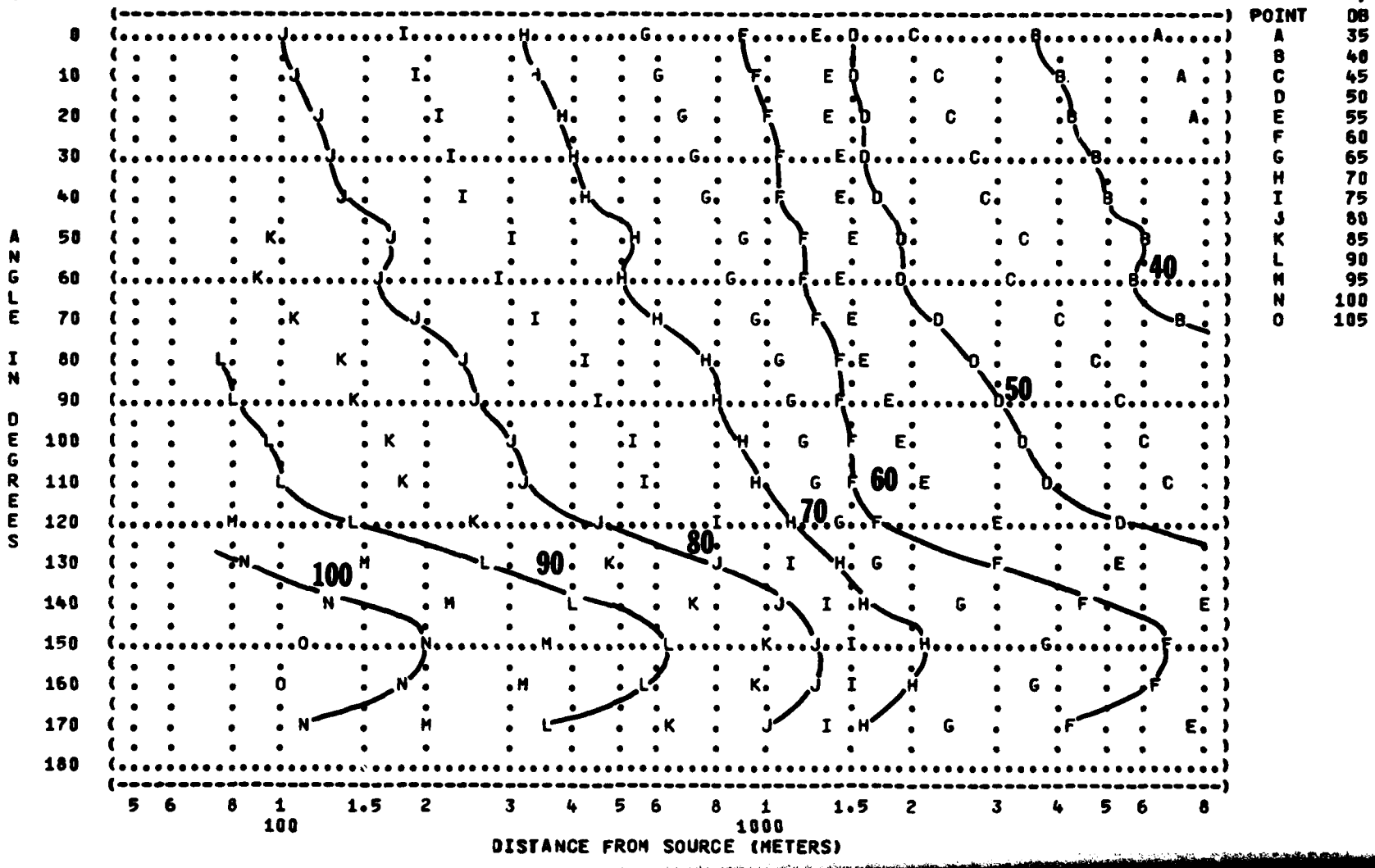
FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 31.5 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 03
02 AUG 76
PAGE 18

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105

FIGURE 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 63 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 03
02 AUG 76
PAGE 19

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110

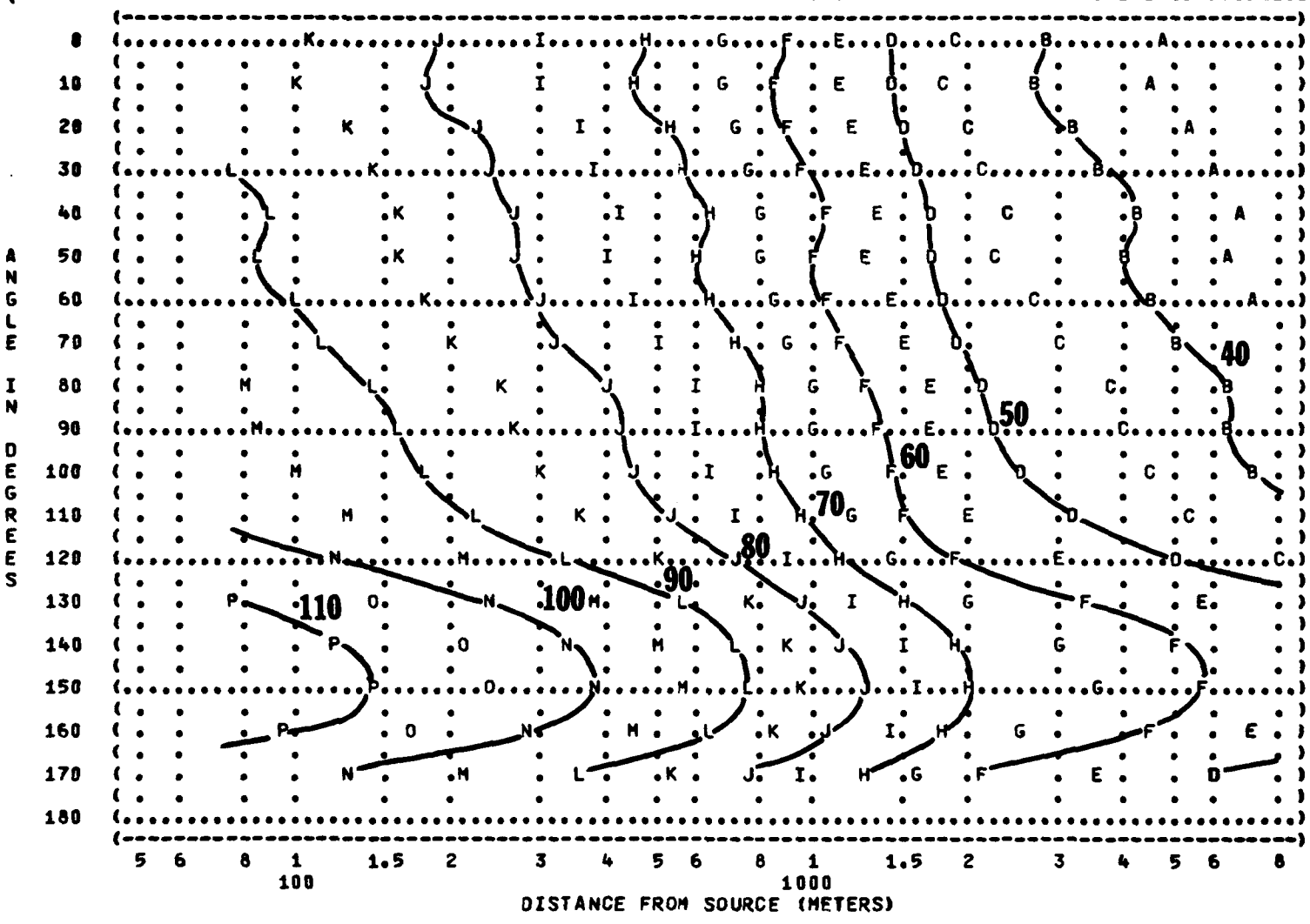


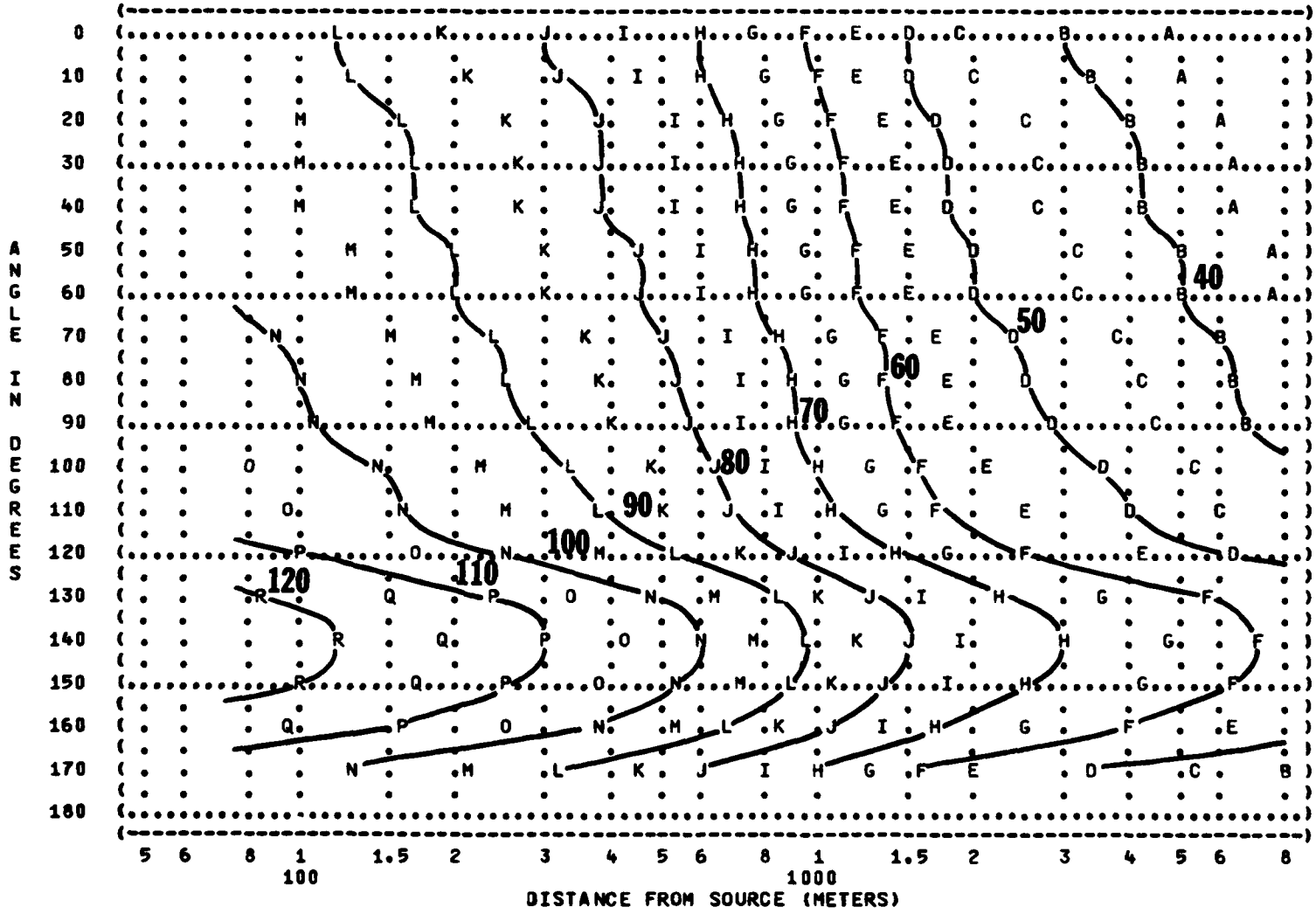
FIGURE 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 125 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 03
02 AUG 76
PAGE 20



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110
Q	115
R	120

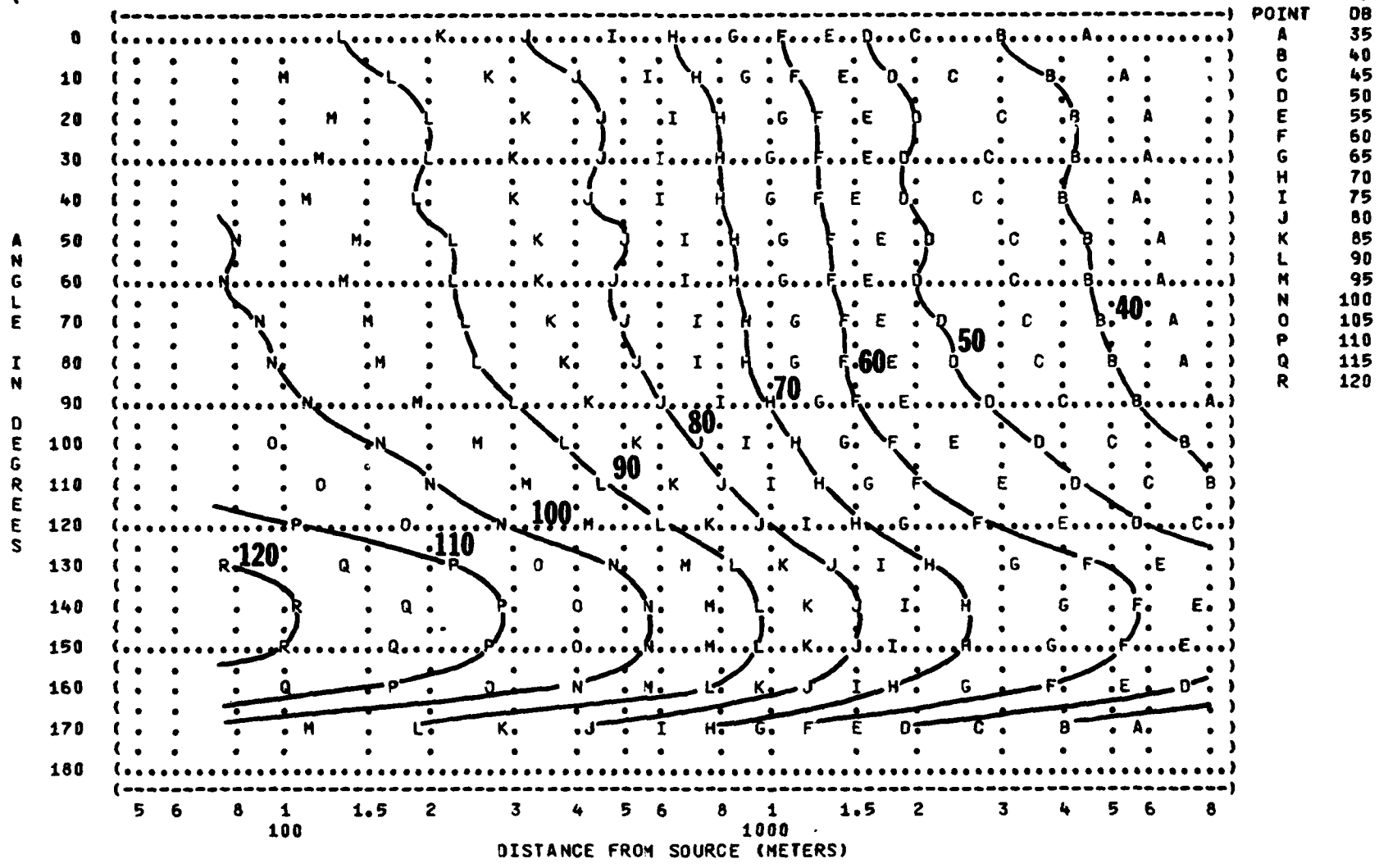
FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 250 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 03
02 AUG 76
PAGE 21



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110
Q	115
R	120

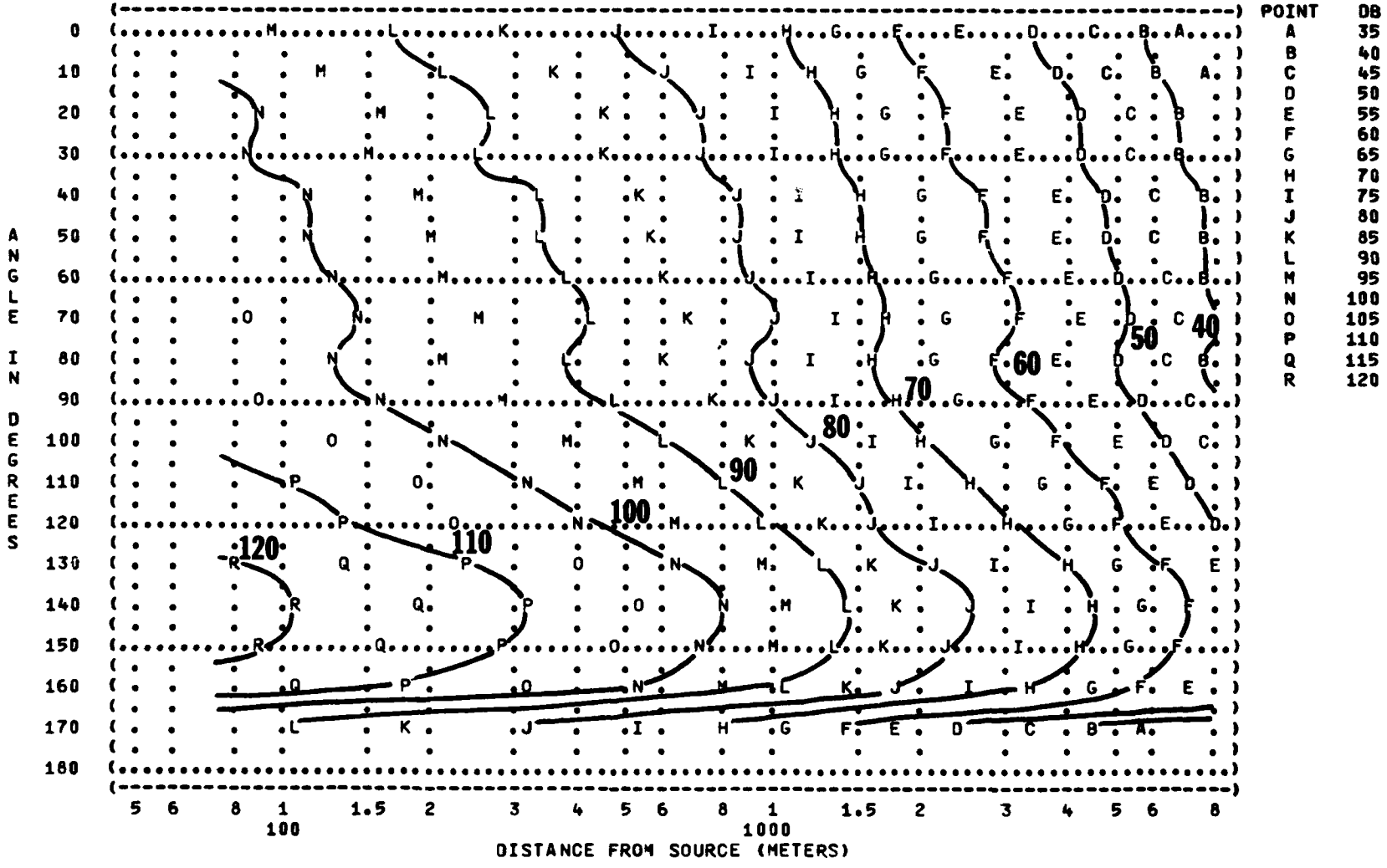
FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 500 HZ OCTAVE BAND

IDENTIFICATION: OMEGA 1.4 TEST 75-002-026 RUN 03 02 AUG 76 PAGE 22

NOISE SOURCE/SUBJECT: F-4C AIRCRAFT J79-GE-15/A ENGINE GROUND RUNUP NOISE

OPERATION: MILITARY POWER 100% RPM SINGLE ENGINE FREE FLOW

METEOROLOGY: TEMP = 15 C BAR PRESS = .760 M HG REL HUMID = 70 %



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110
Q	115
R	120

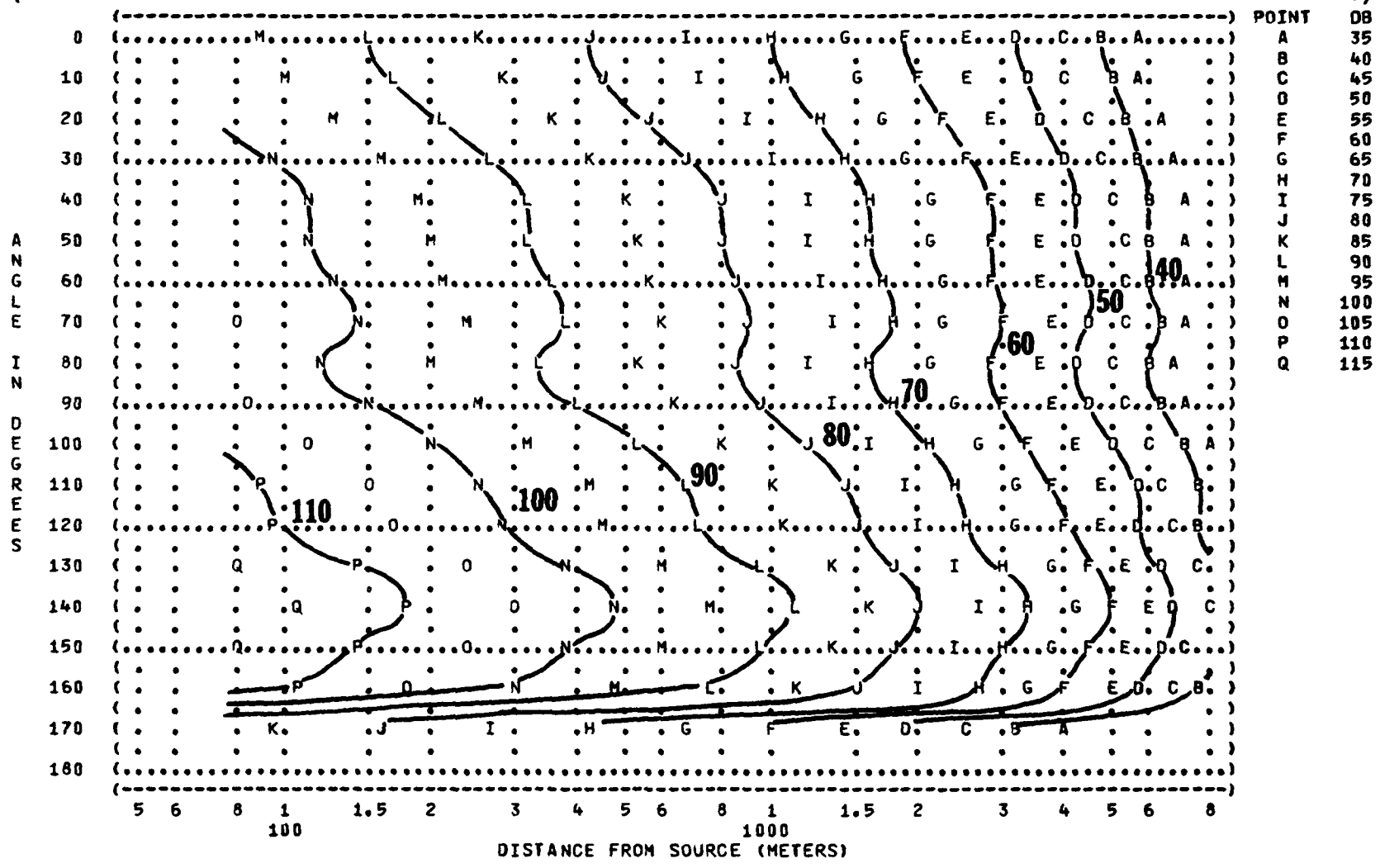
FIGURE: 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 1000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 03
02 AUG 76
PAGE 23



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110
Q	115

FIGURE 11: SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
2000 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 03
02 AUG 76
PAGE 24

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110

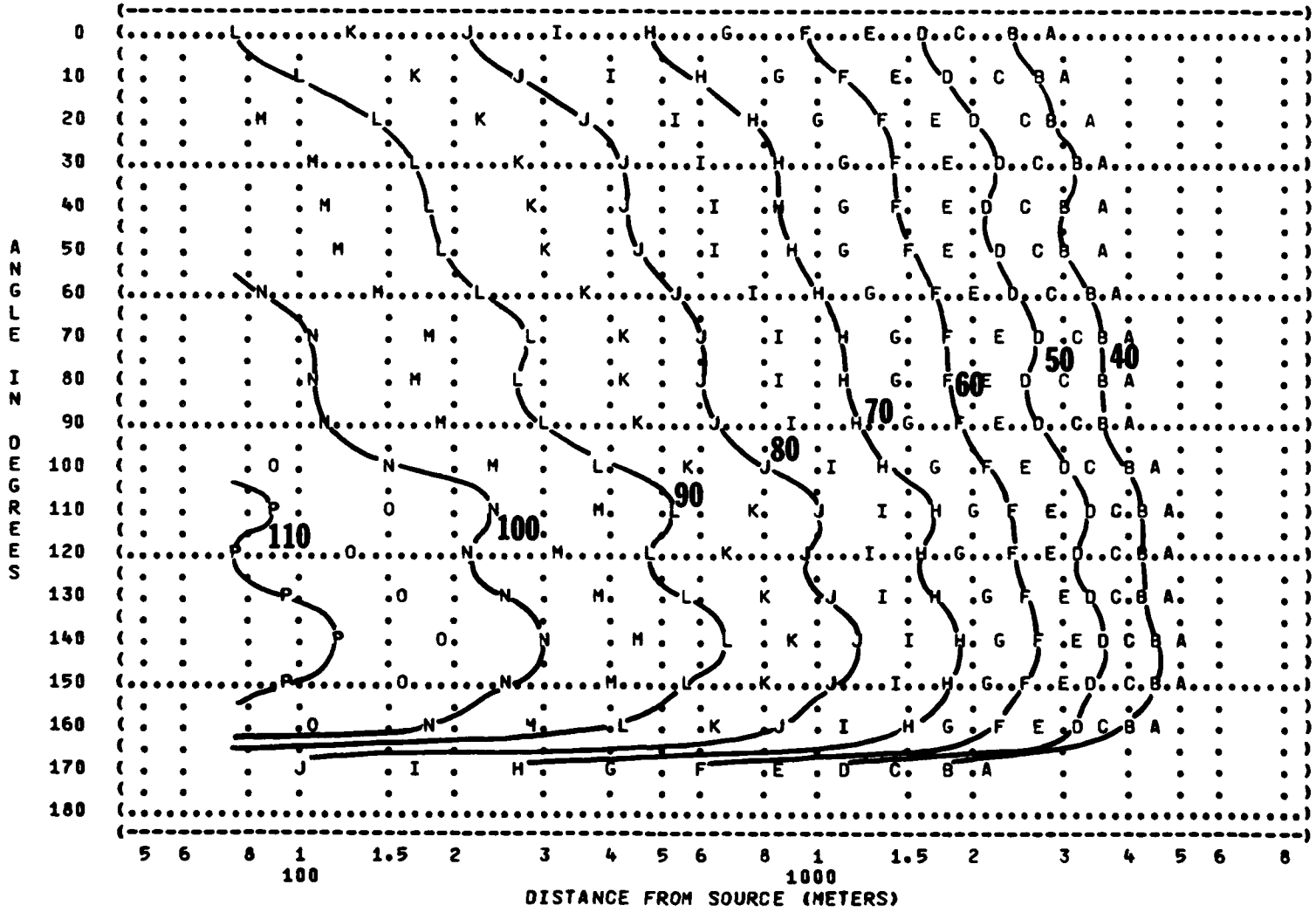


FIGURE: 11

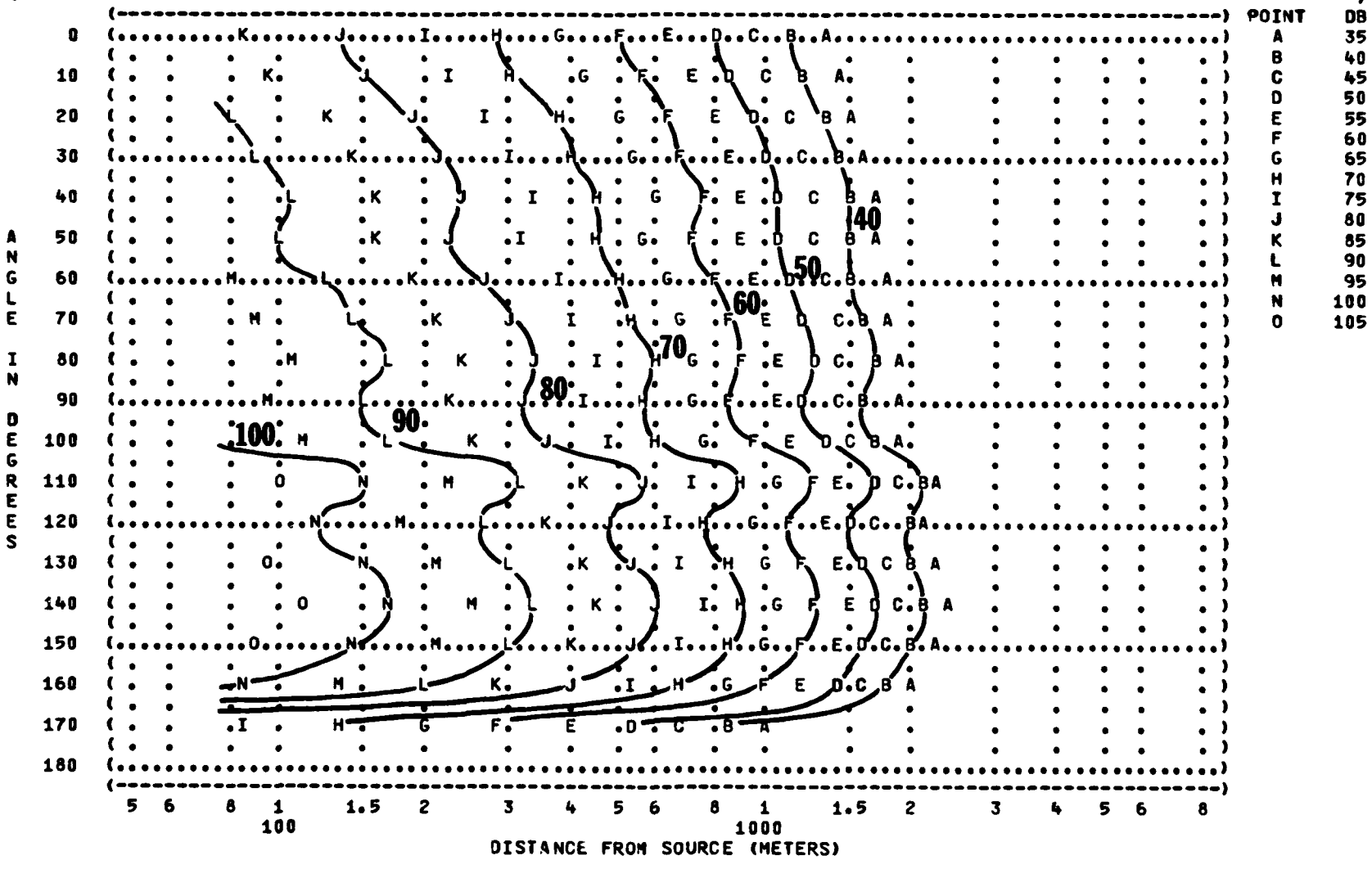
SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
4000 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 03
02 AUG 76
PAGE 25

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105

FIGURE: 11

SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
8000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
MILITARY POWER
100% RPM
SINGLE ENGINE
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 03
02 AUG 76
PAGE 26

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100

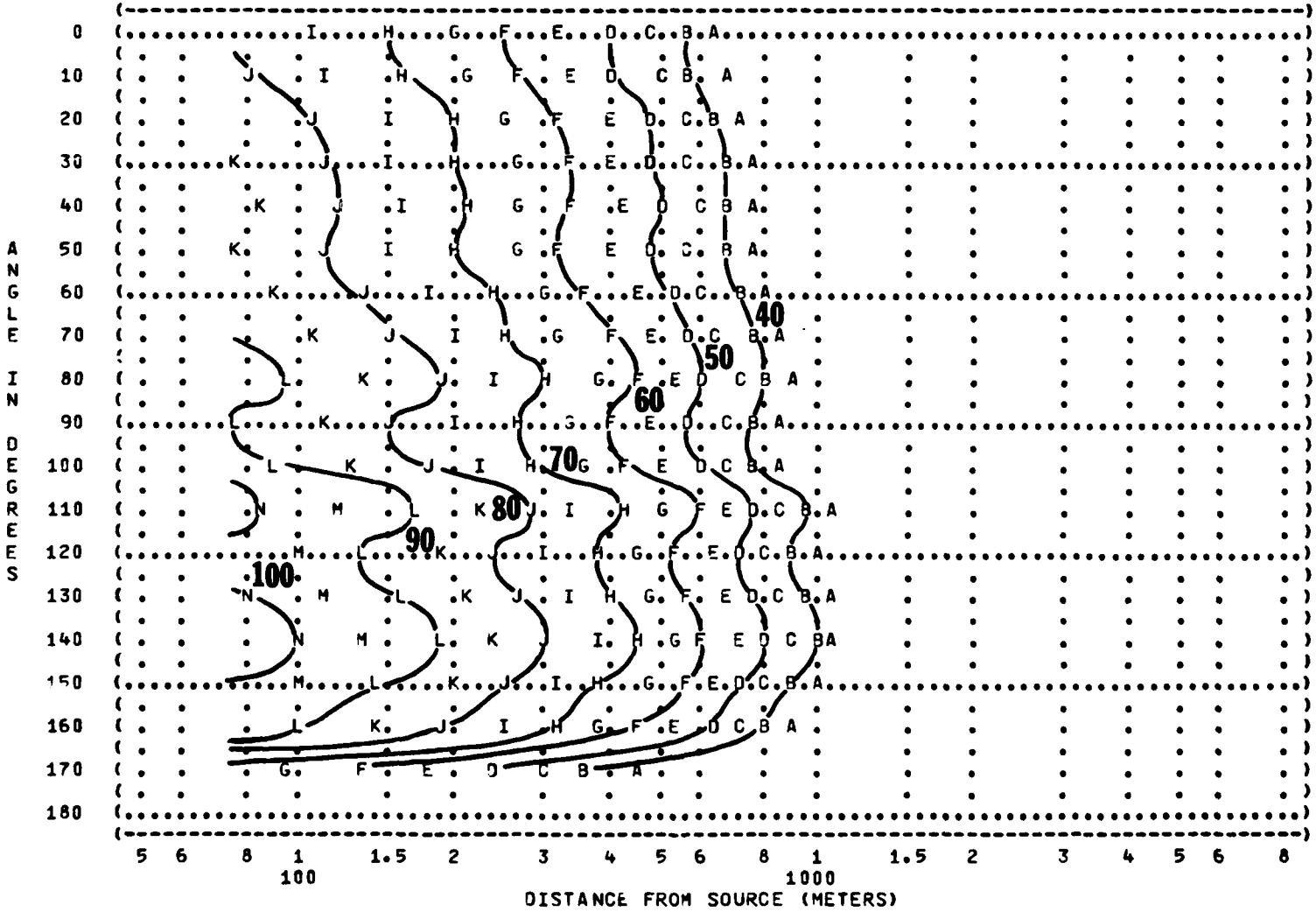


FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 31.5 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

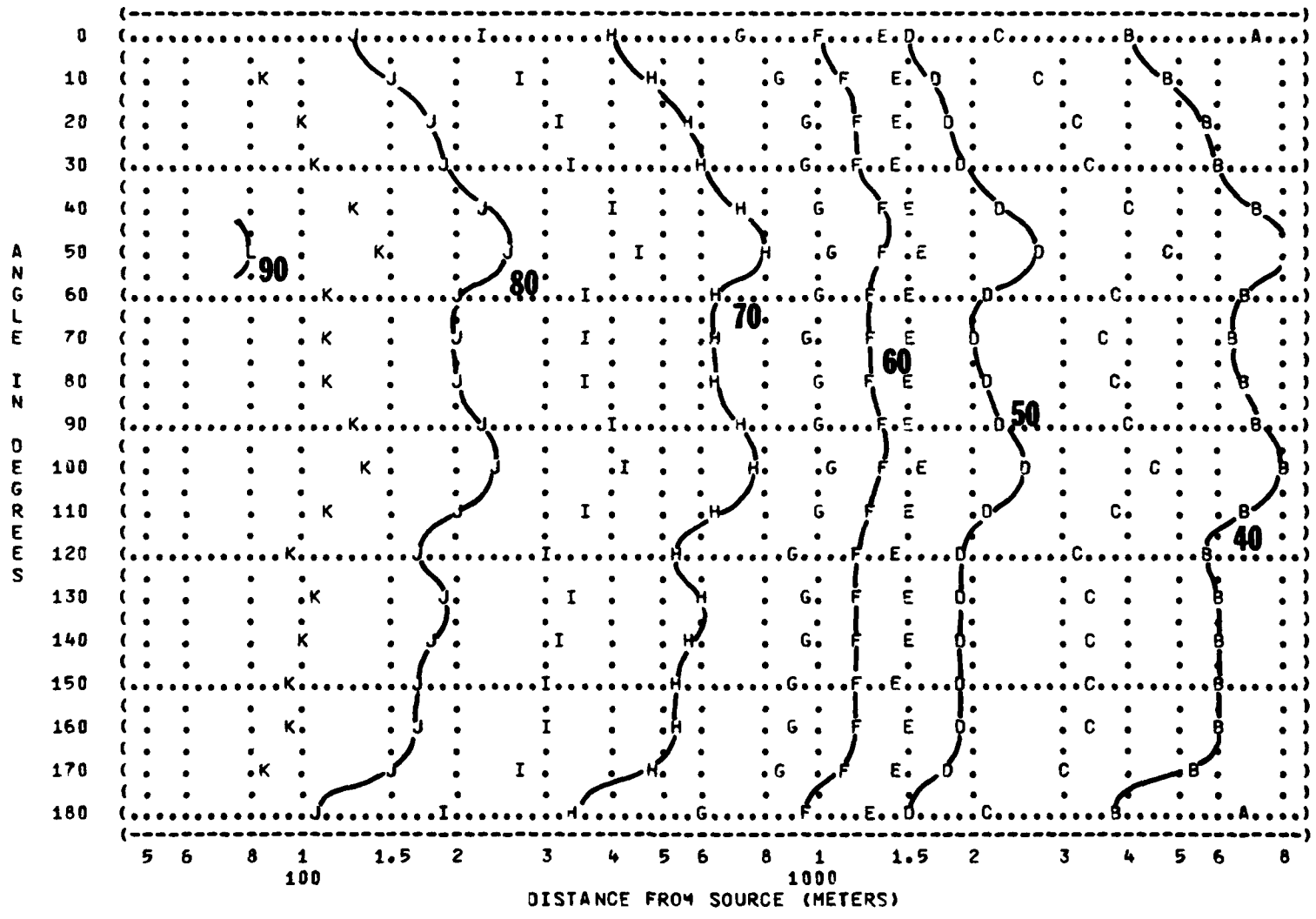
OPERATION:
IDLE POWER
65% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 04

02 AUG 76

PAGE 18



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90

FIGURE 11: SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
63 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 04
02 AUG 76
PAGE 19

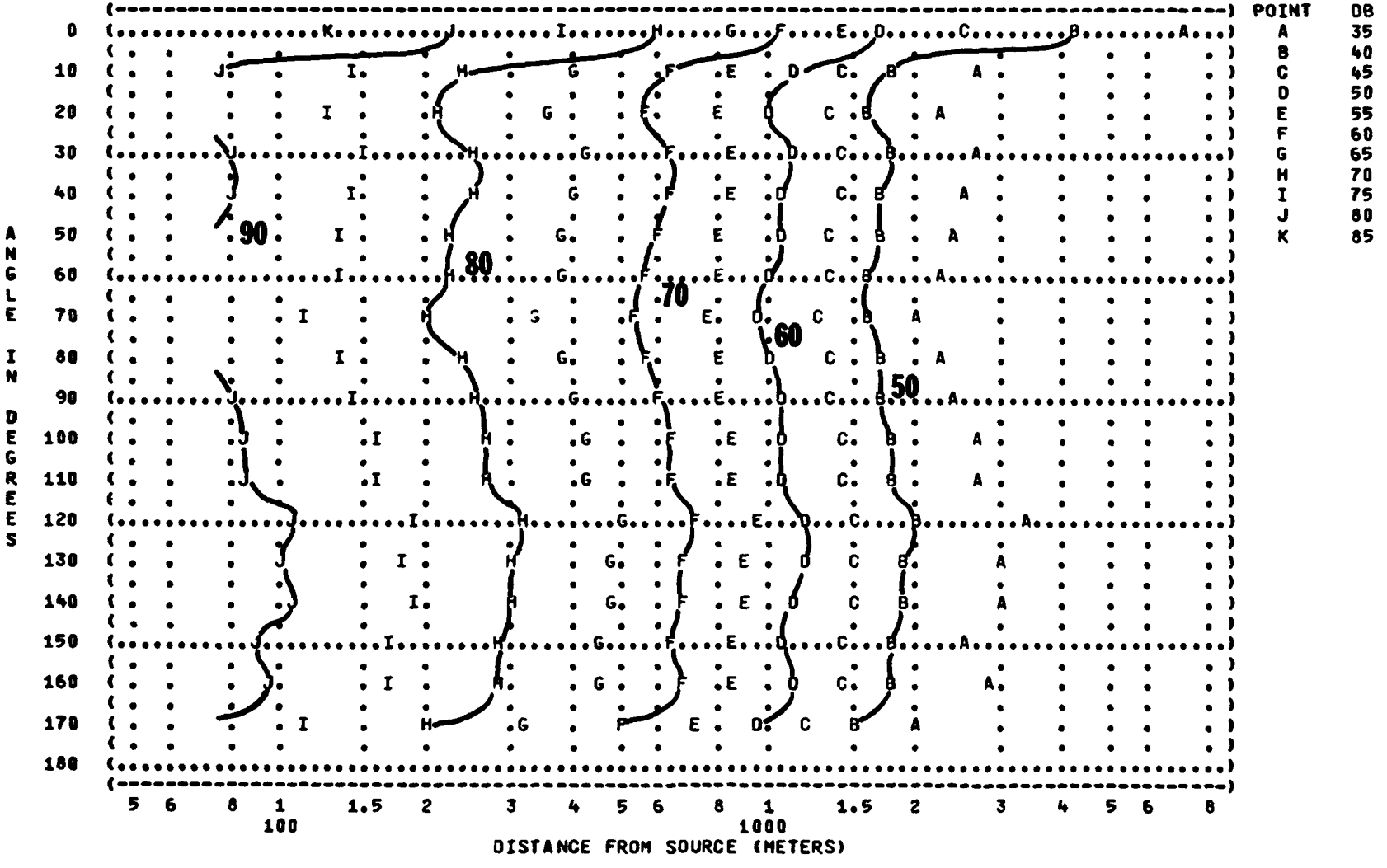


FIGURE 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 125 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 04
02 AUG 76
PAGE 20

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85

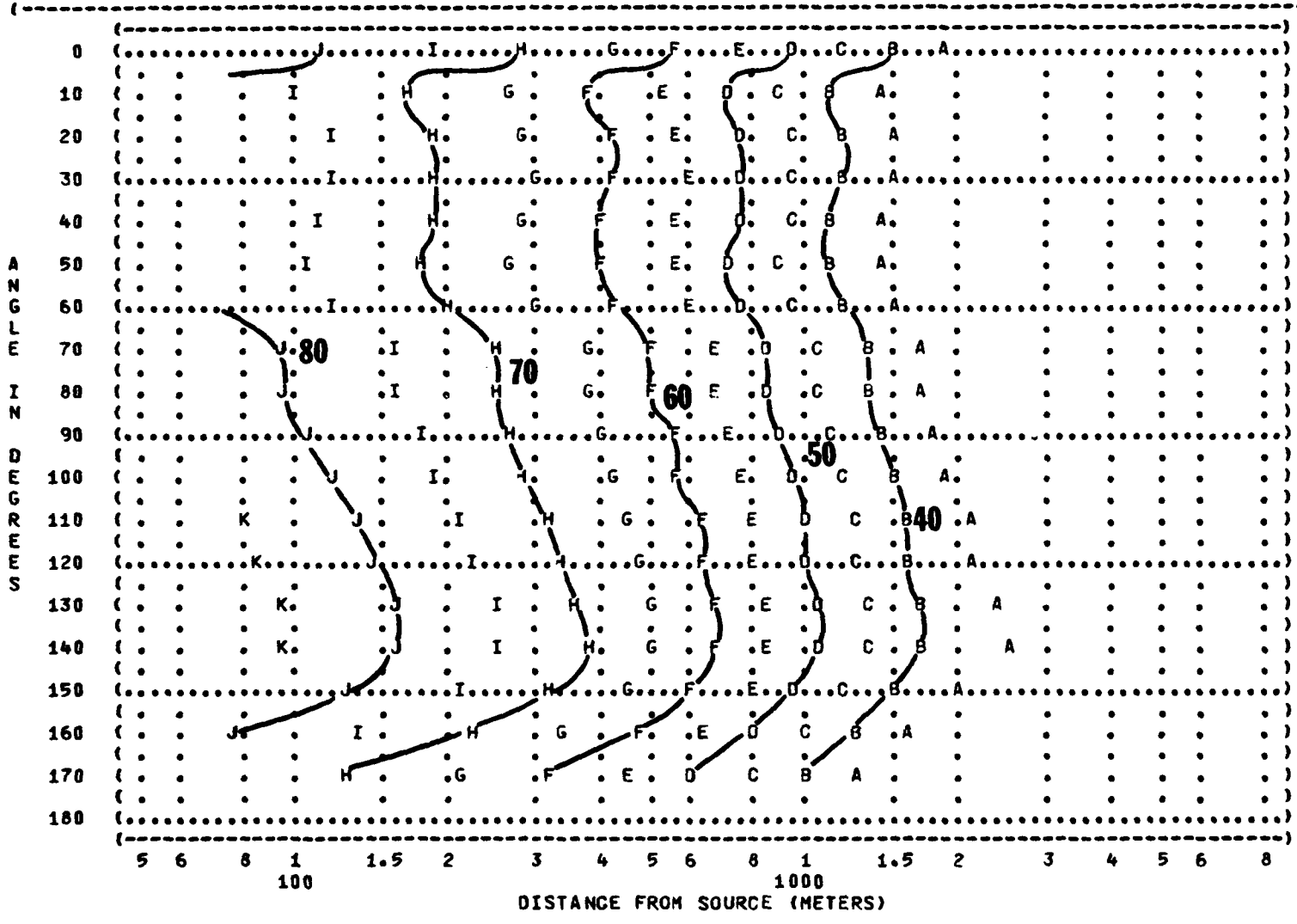


FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 250 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 04
02 AUG 76
PAGE 21

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80

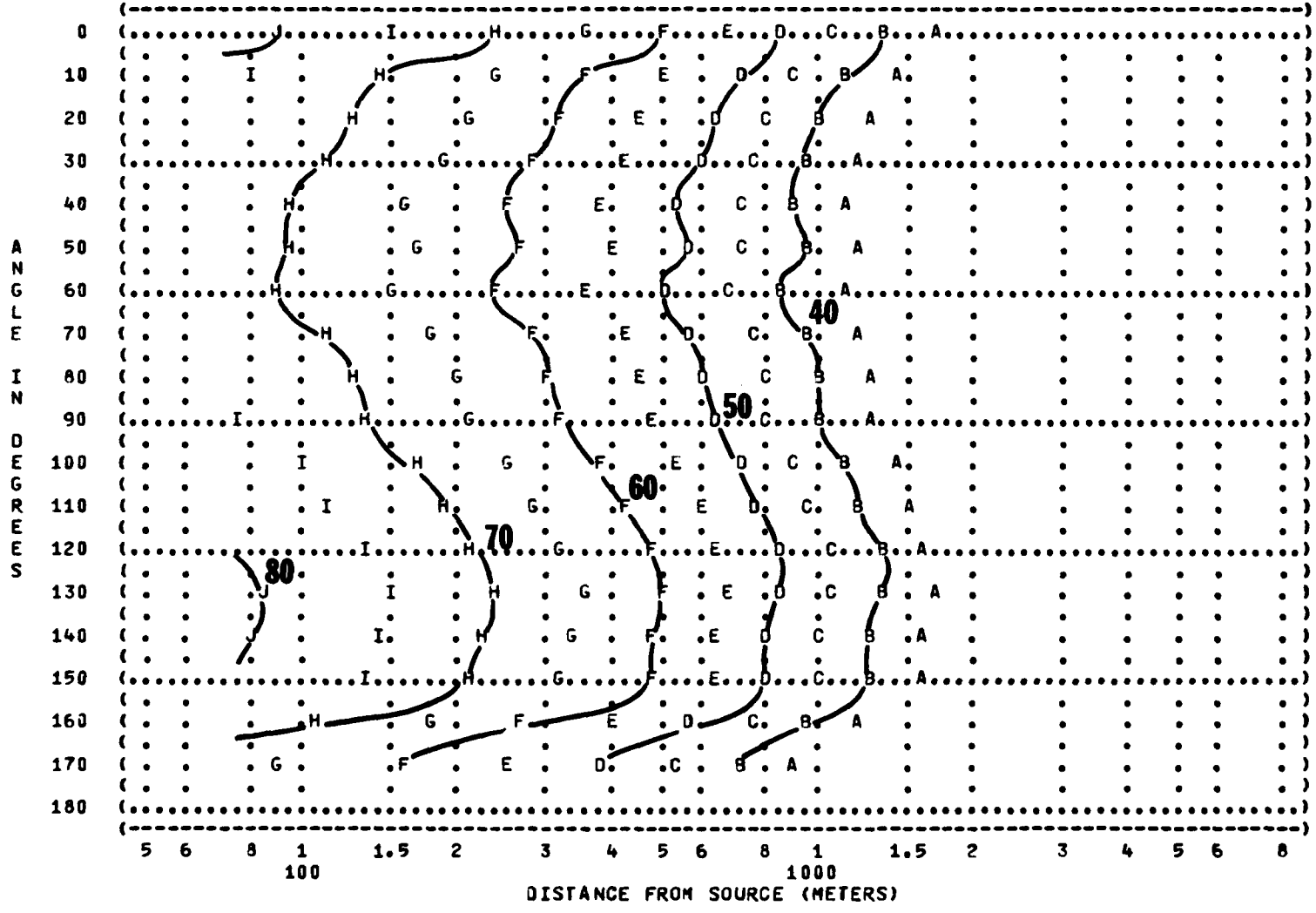


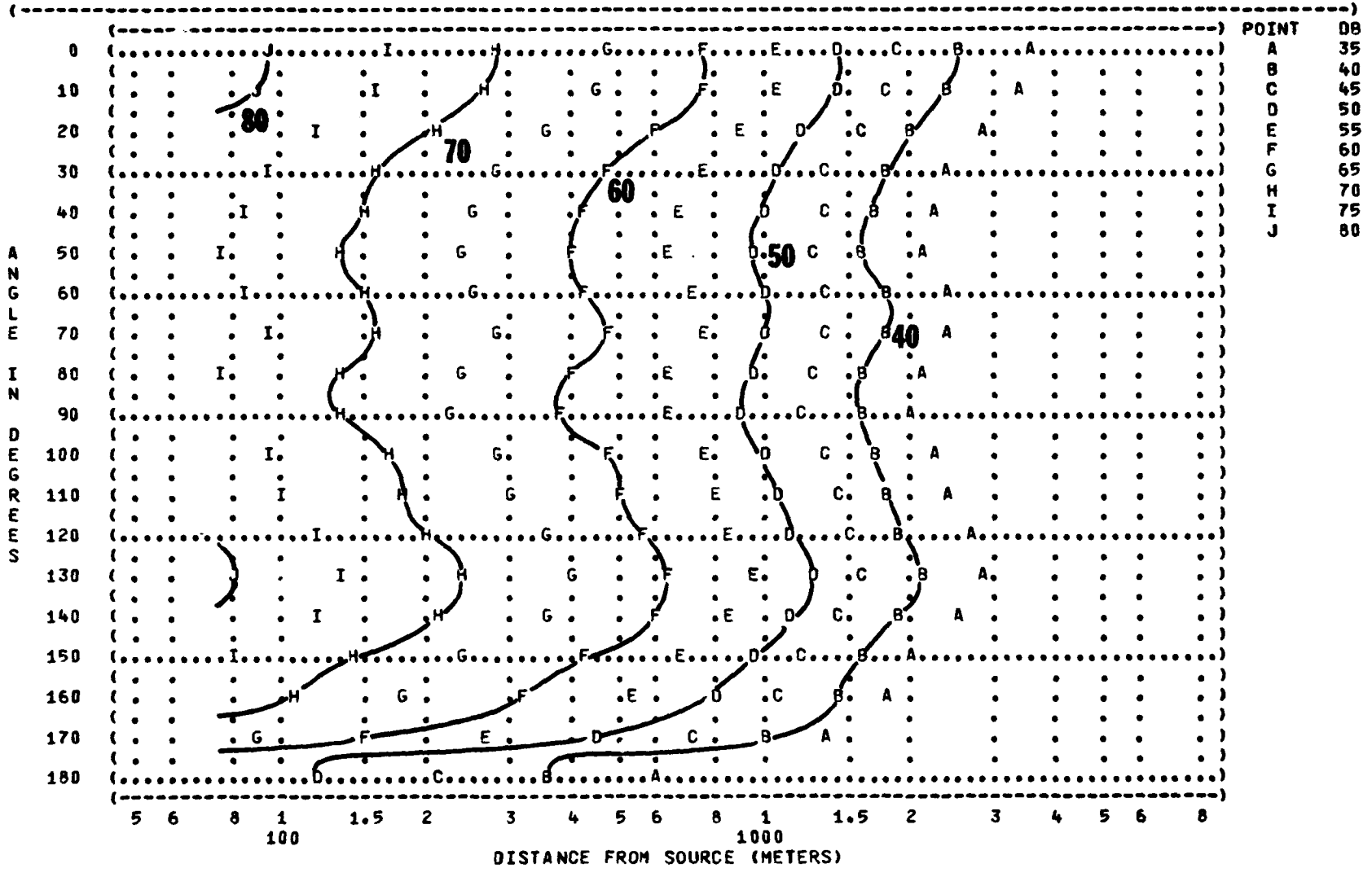
FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 500 HZ OCTAVE BAND

IDENTIFICATION: OMEGA 1.4 TEST 75-002-026 RUN 04 02 AUG 76 PAGE 22

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80

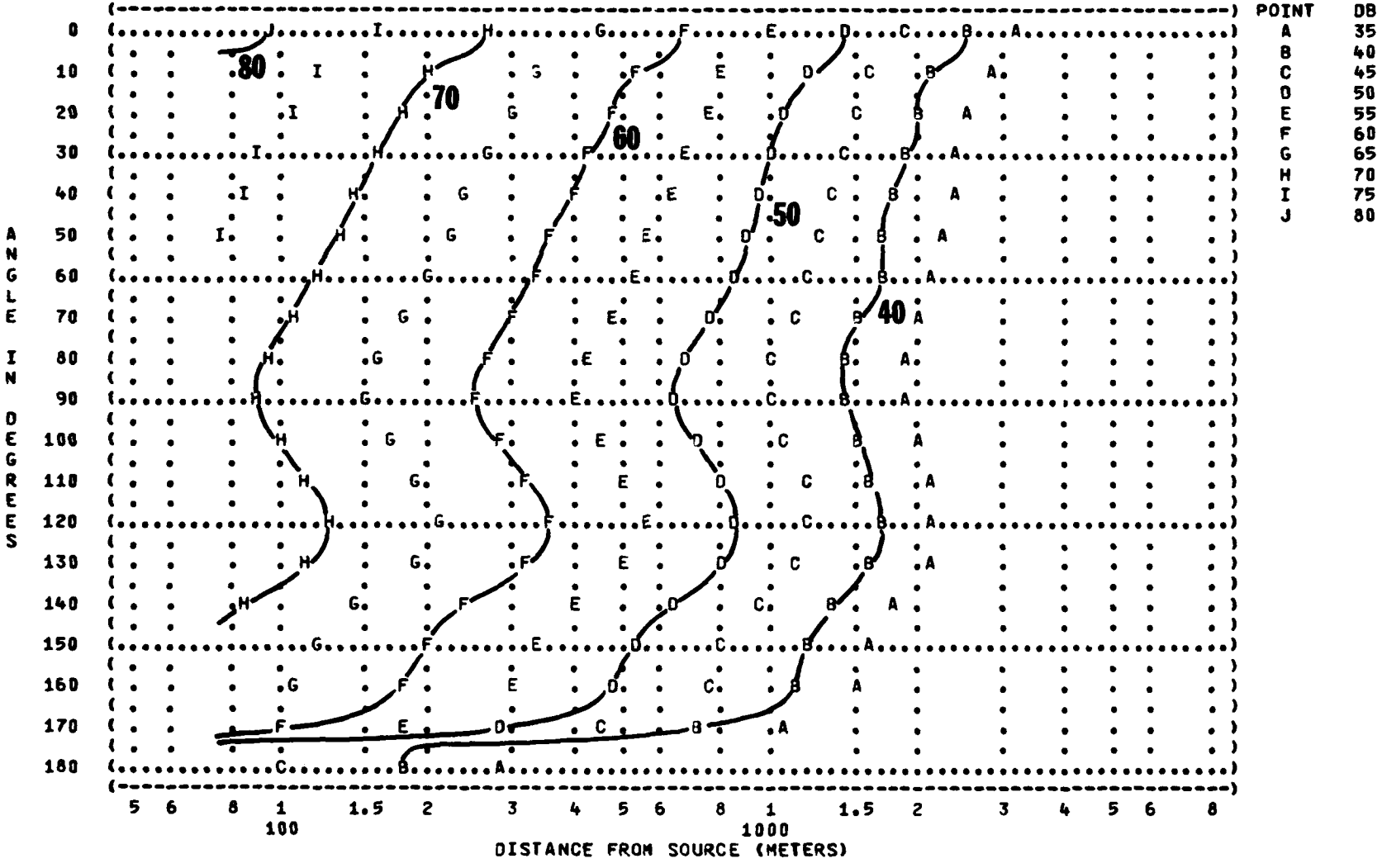
FIGURE: 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 1000 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 04
02 AUG 76
PAGE 23

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80

FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 2000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 04
02 AUG 76
PAGE 24

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85

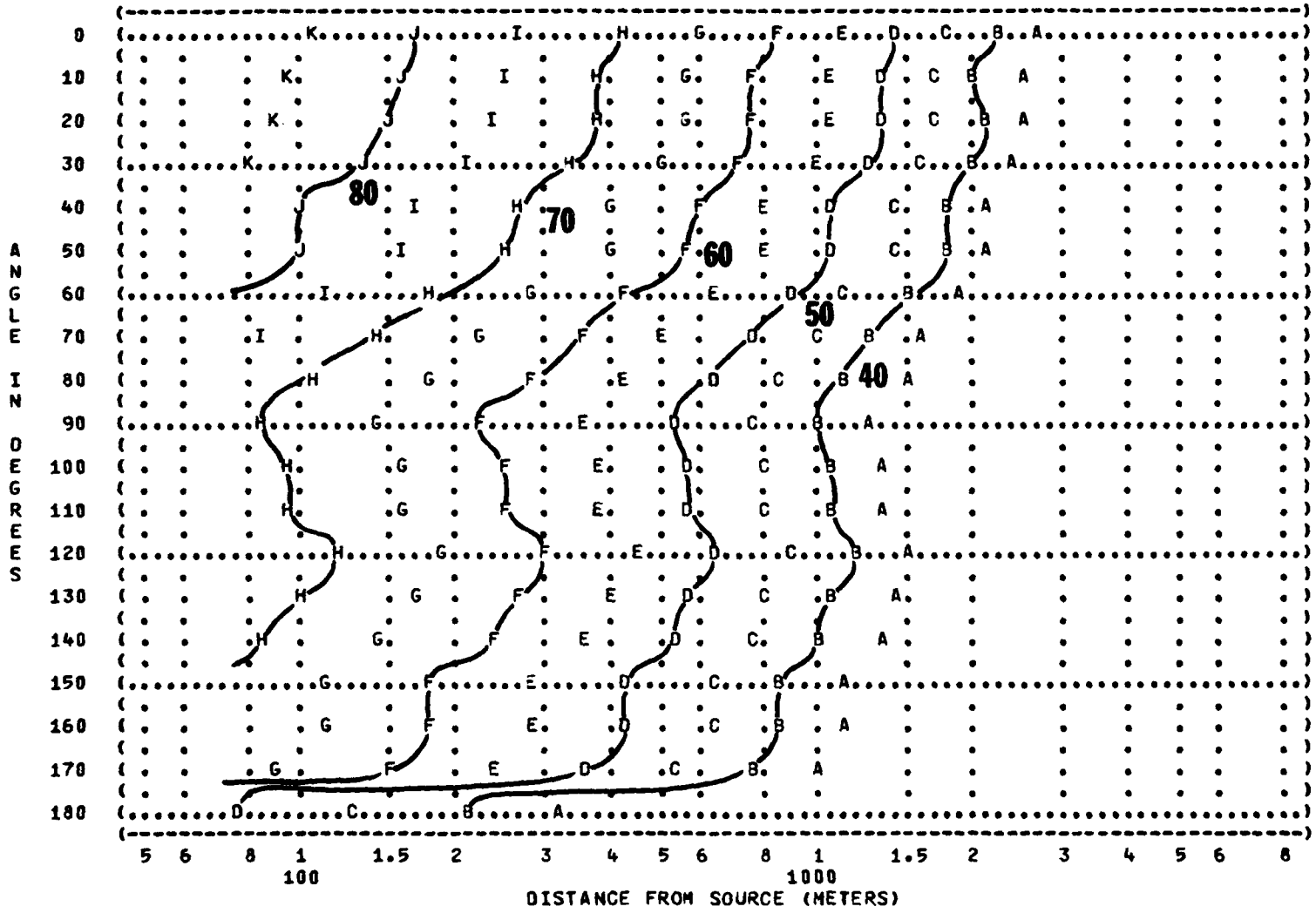


FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 4000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 04
02 AUG 76
PAGE 25

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80

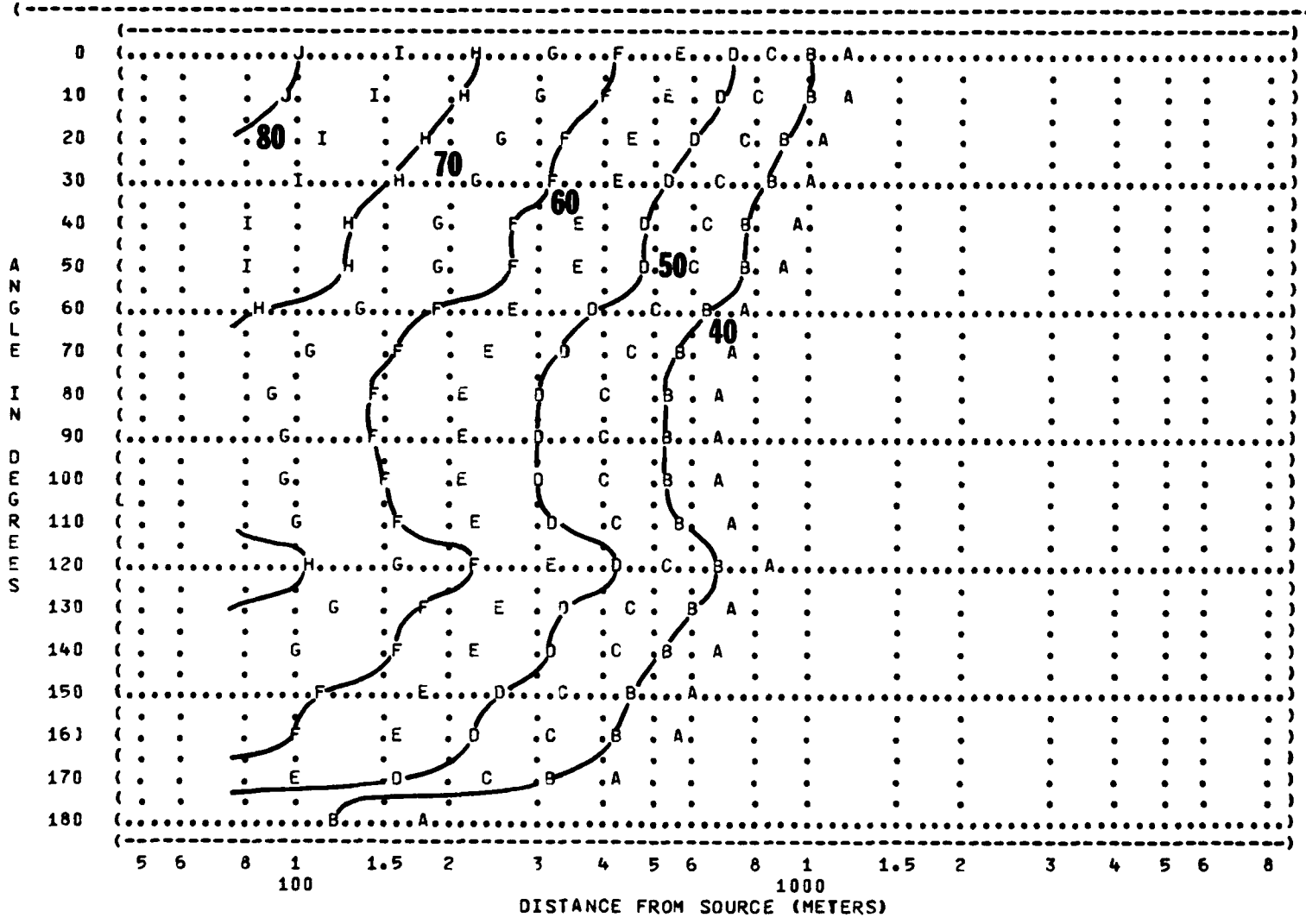


FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 8000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
IDLE POWER
65% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 04
02 AUG 76
PAGE 26

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75

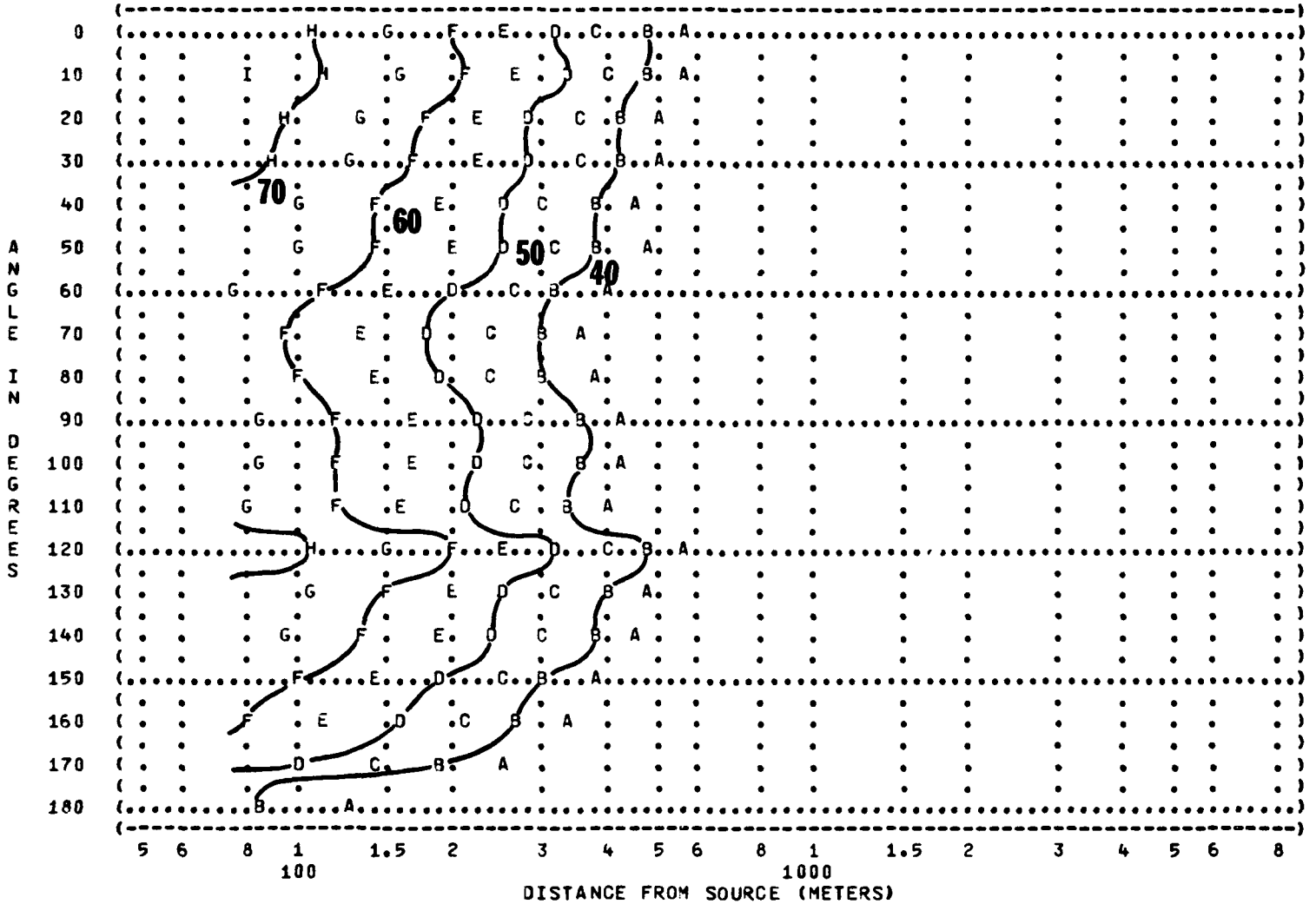


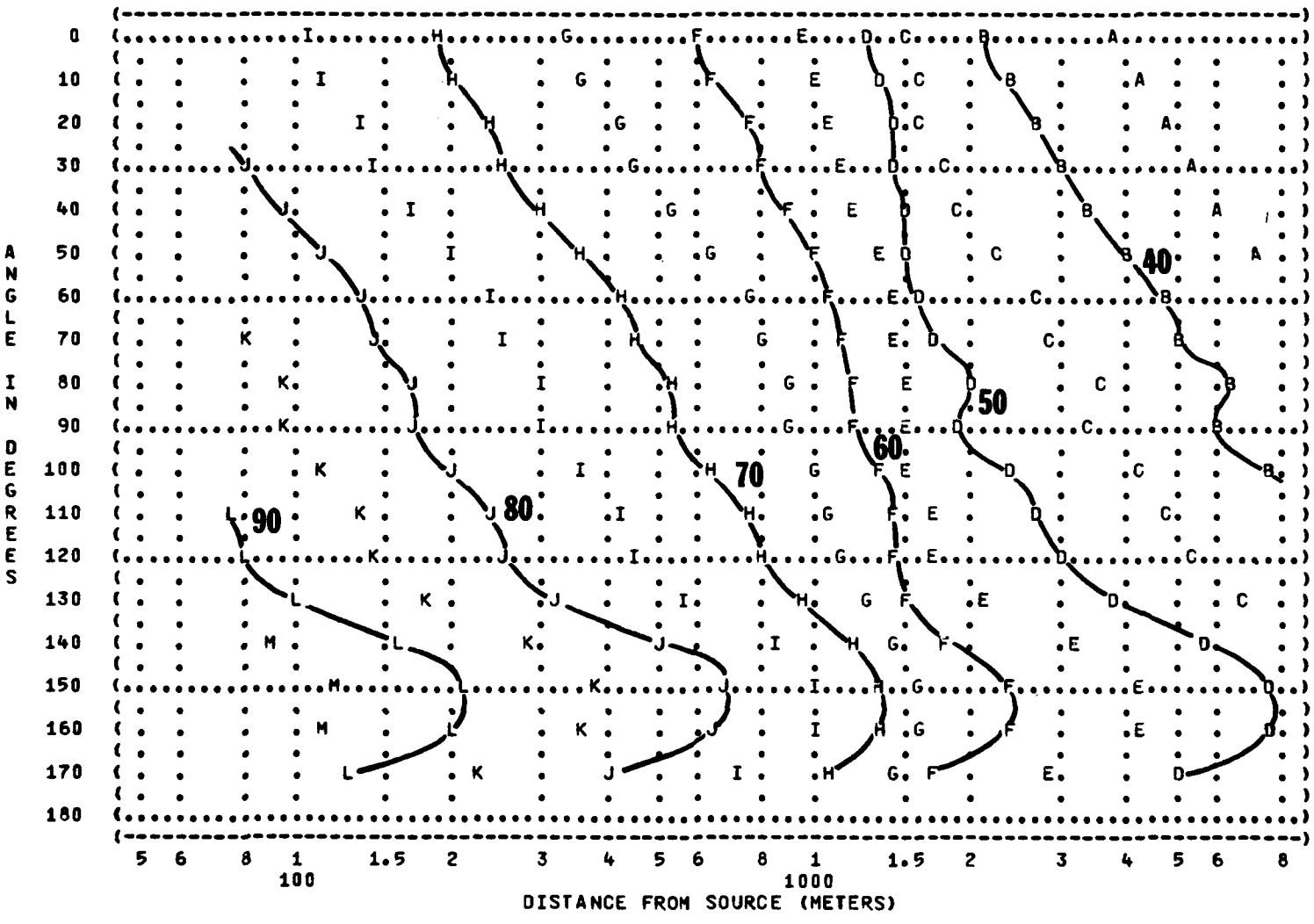
FIGURE: 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 31.5 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 05
02 AUG 76
PAGE 18

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95

FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 63 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 05
02 AUG 76
PAGE 19

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105

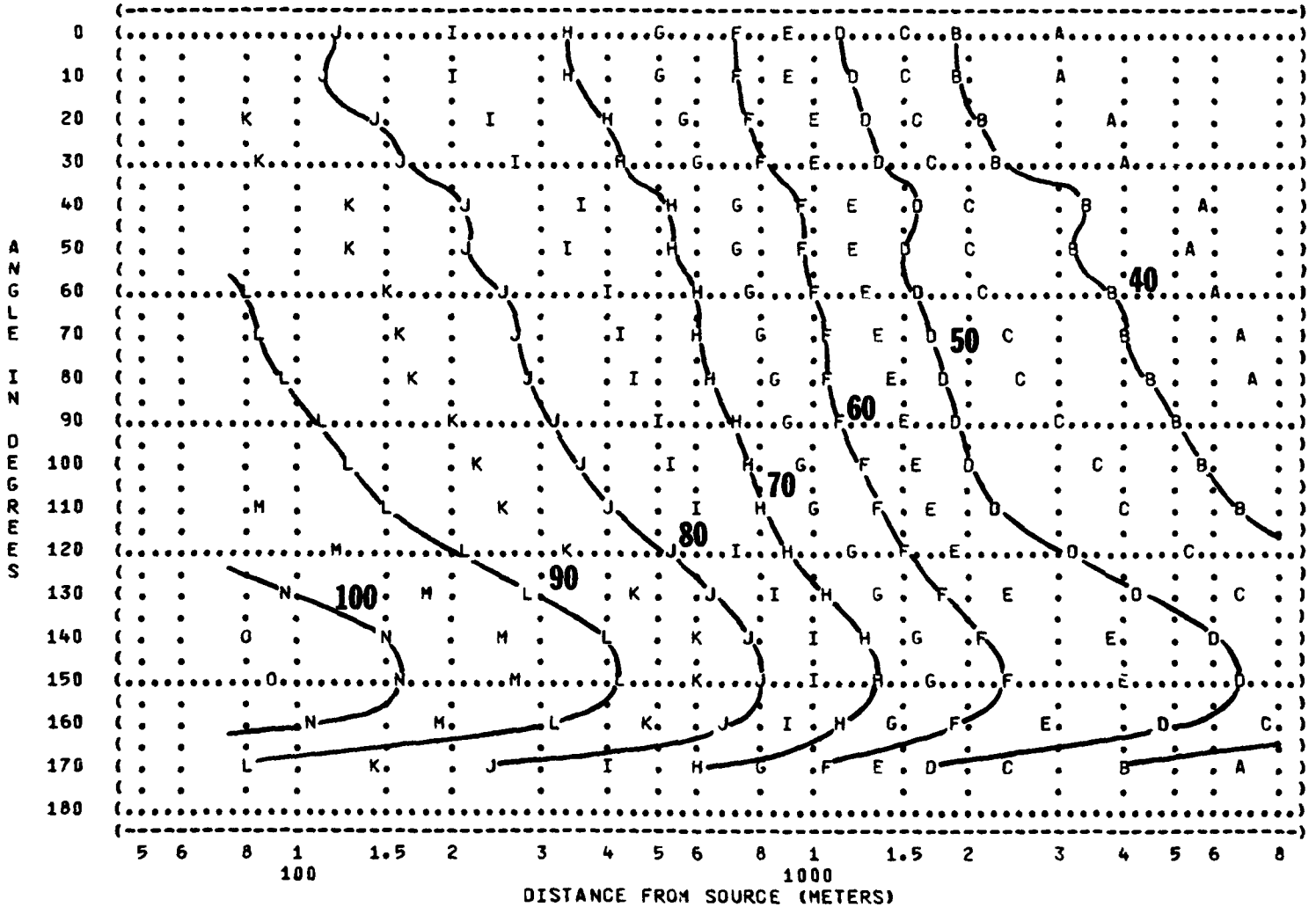


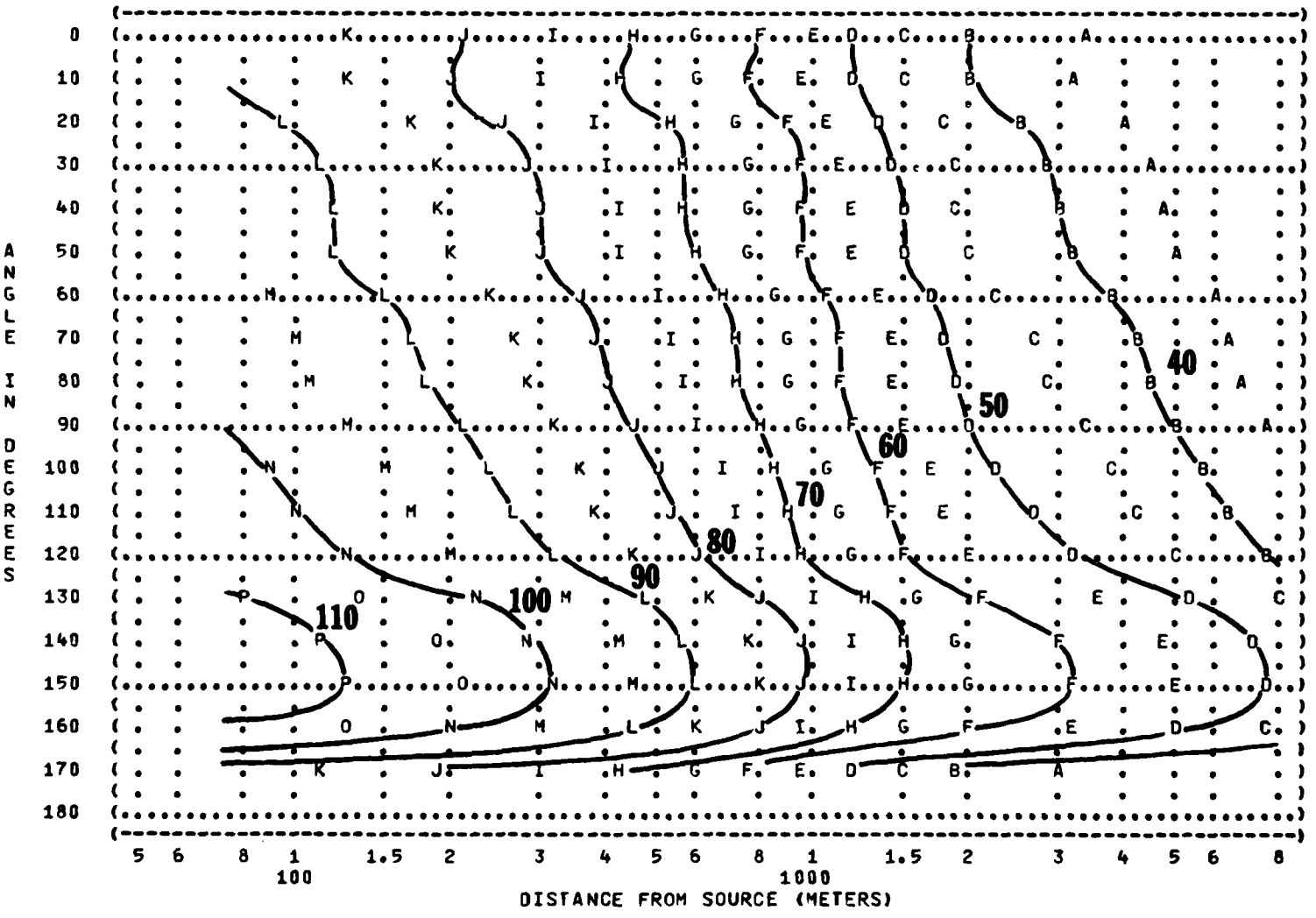
FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 125 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 05
02 AUG 76
PAGE 20

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110

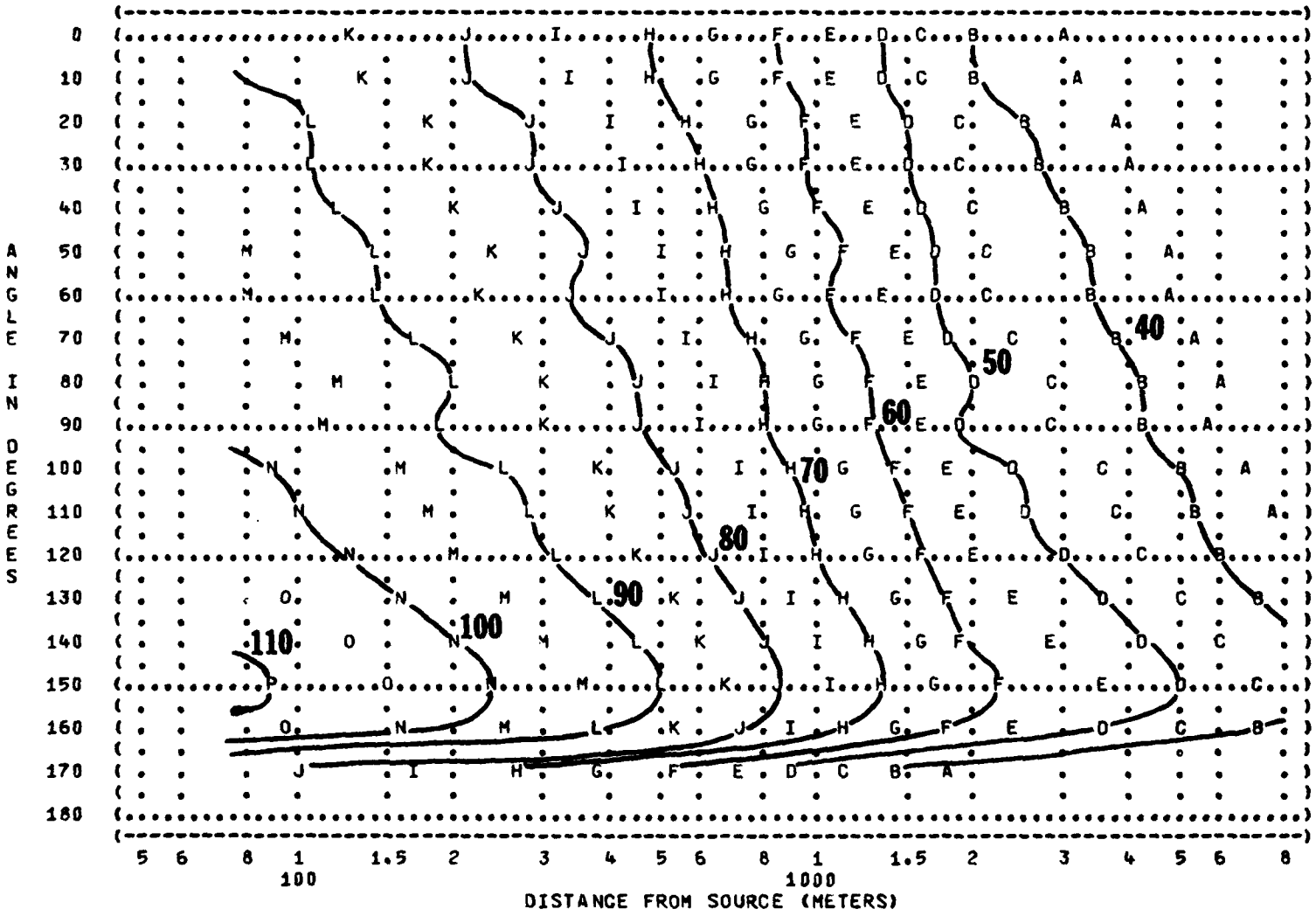
FIGURE: 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 250 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 05
02 AUG 76
PAGE 21

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110

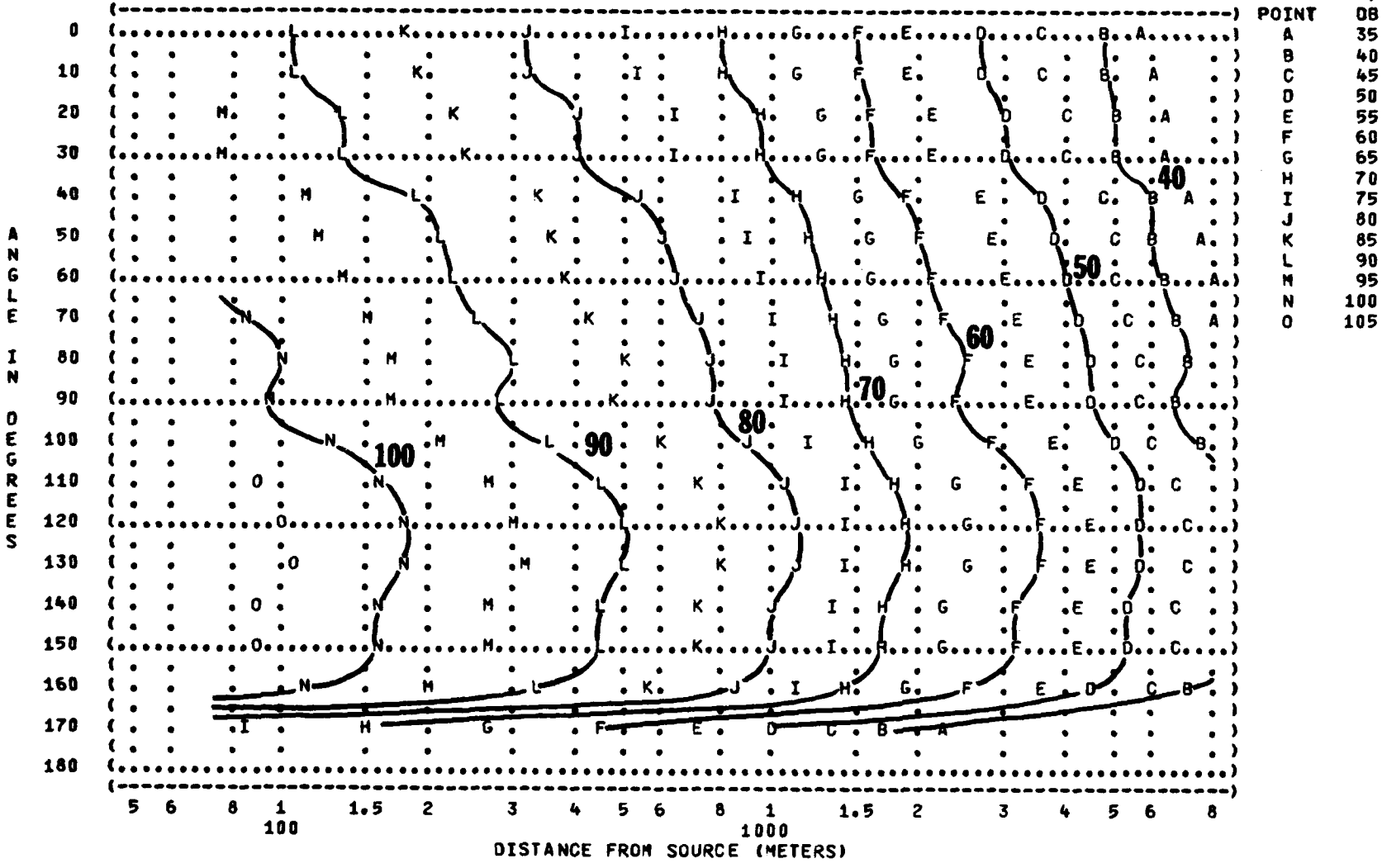
FIGURE 11: SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
500 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 05
02 AUG 76
PAGE 22



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105

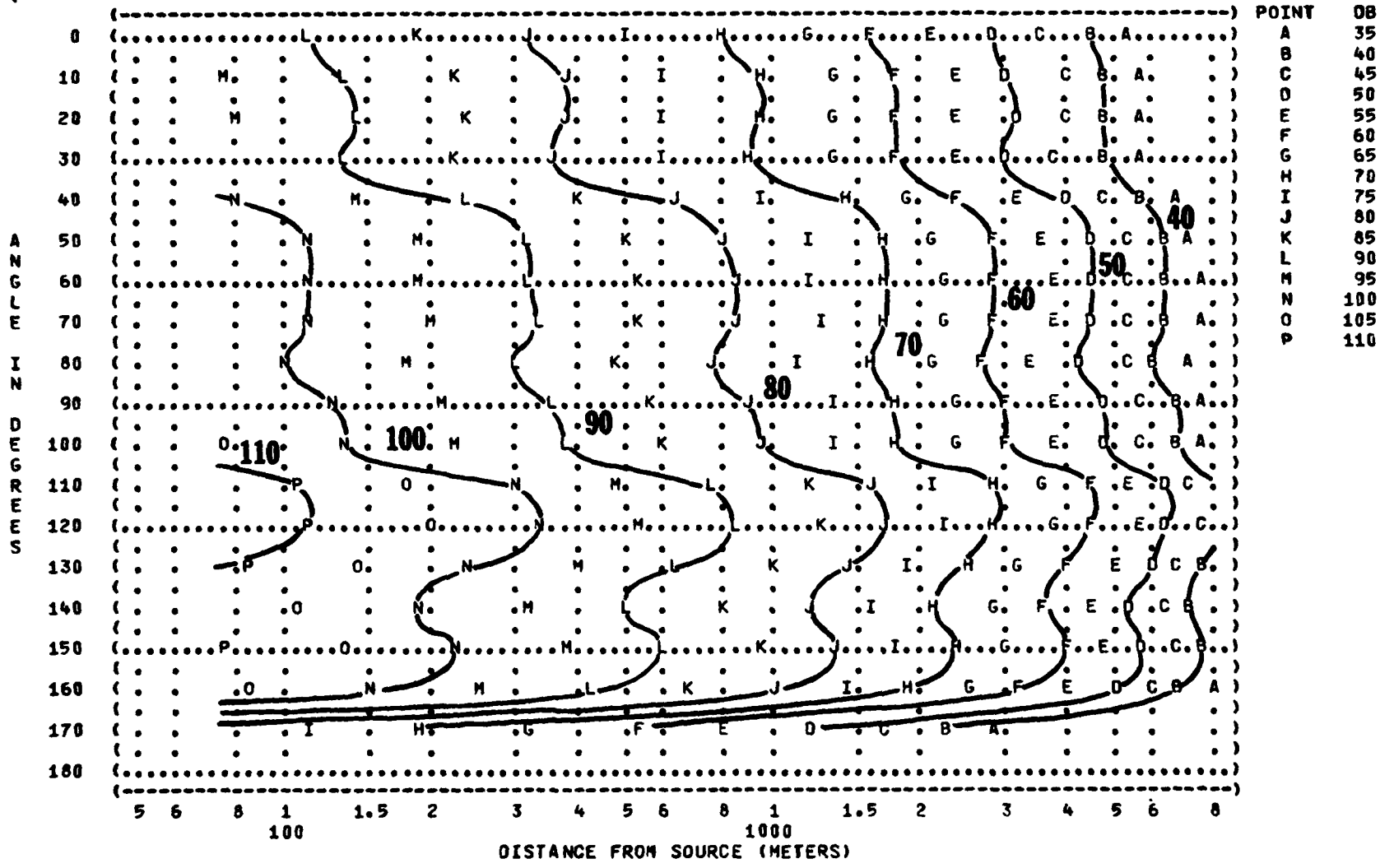
FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 1000 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 05
02 AUG 76
PAGE 23

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110

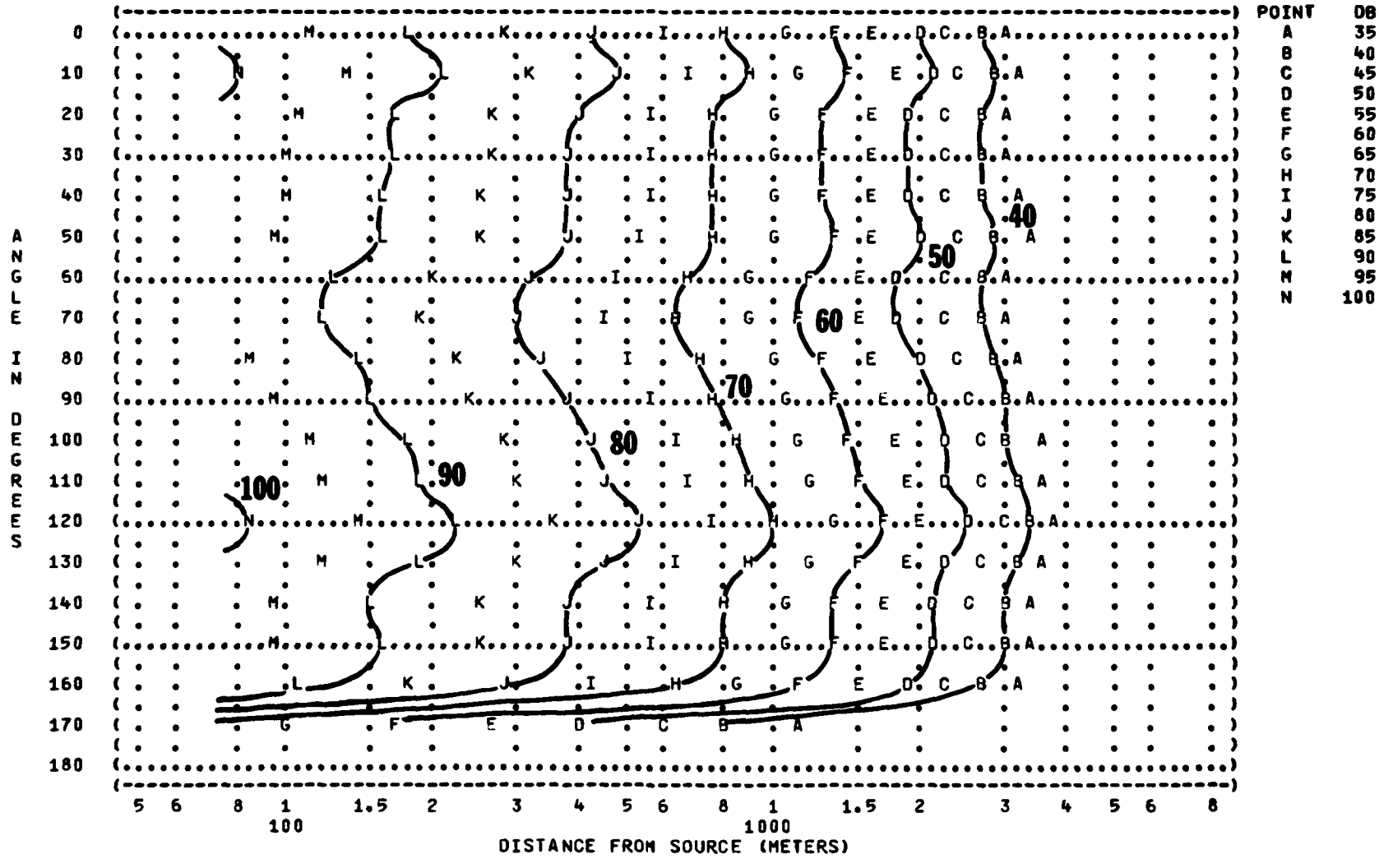
FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 2000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 05
02 AUG 76
PAGE 24



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100

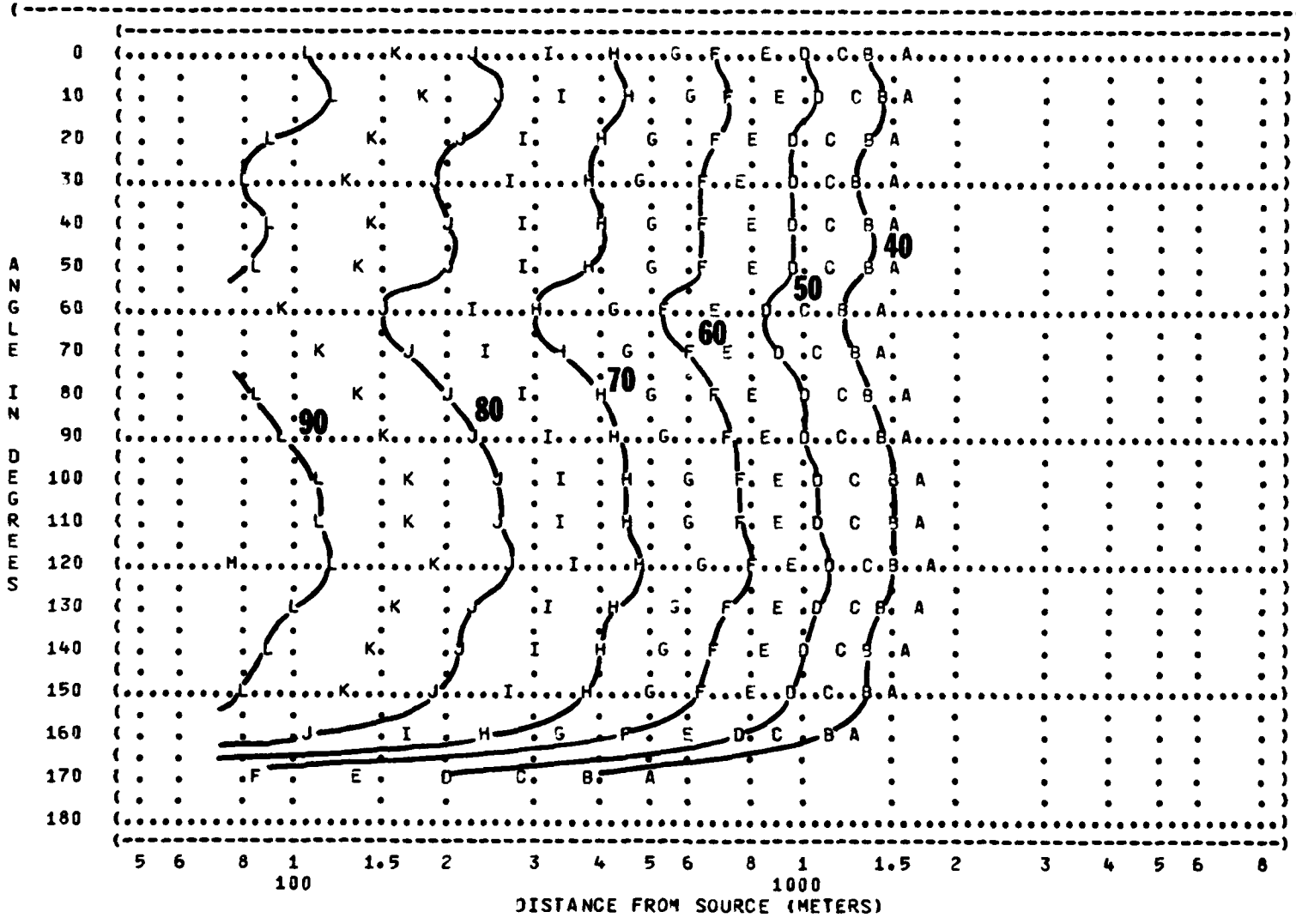
FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 4000 HZ OCTAVE BAND

IDENTIFICATION: OMEGA 1.4 TEST 75-002-026 RUN 05 02 AUG 76 PAGE 25

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95

FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 8000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
GROUND RUNUP NOISE

OPERATION:
85% RPM
BOTH ENGINES
FREE FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-026
RUN 05
02 AUG 76
PAGE 26

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85

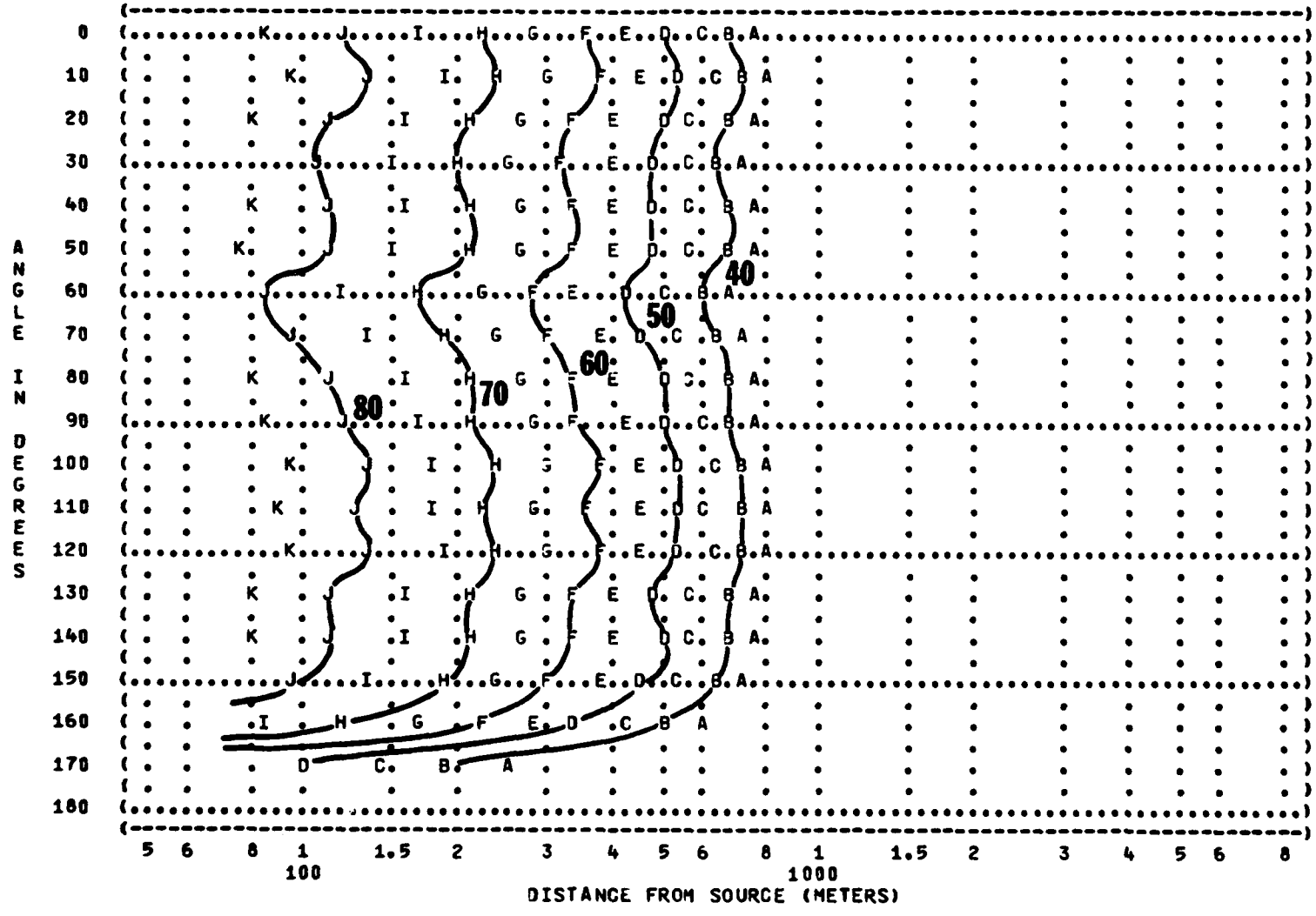


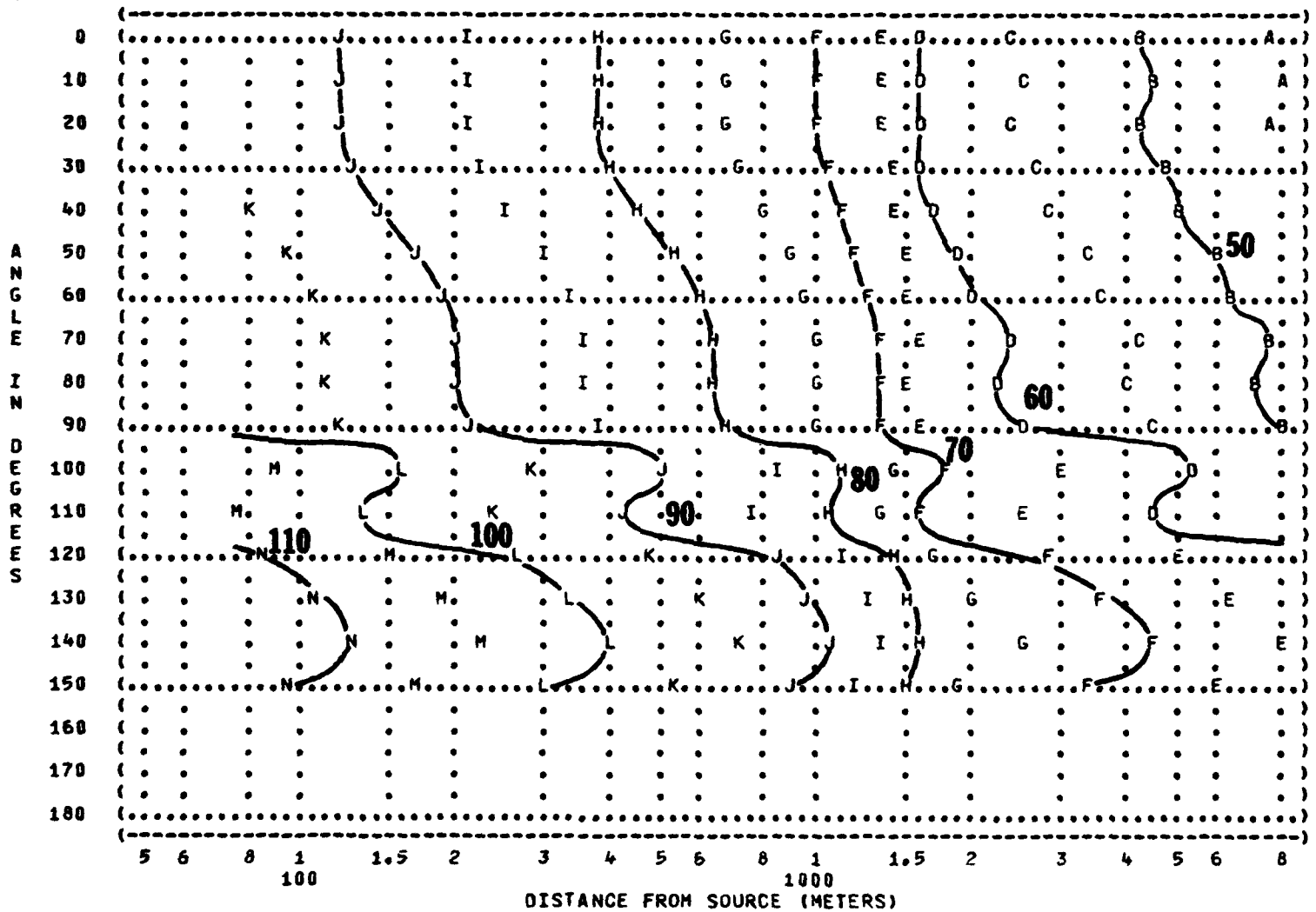
FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 31.5 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
DEFLECTED FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-059
RUN 03
09 AUG 76
PAGE 18



POINT	DB
A	45
B	50
C	55
D	60
E	65
F	70
G	75
H	80
I	85
J	90
K	95
L	100
M	105
N	110

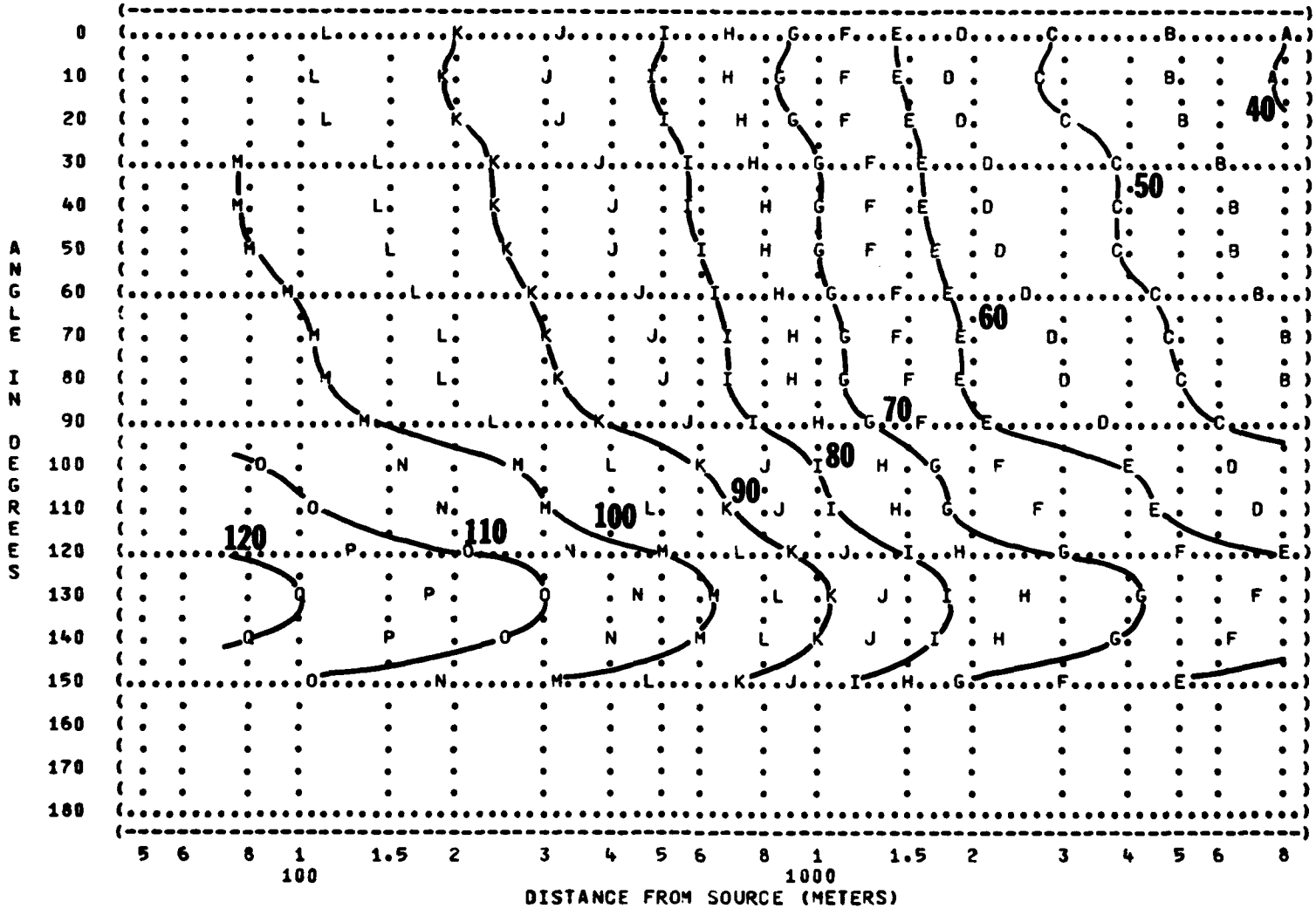
FIGURE 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 63 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
DEFLECTED FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-059
RUN 03
09 AUG 76
PAGE 19



POINT	DB
A	40
B	45
C	50
D	55
E	60
F	65
G	70
H	75
I	80
J	85
K	90
L	95
M	100
N	105
O	110
P	115
Q	120

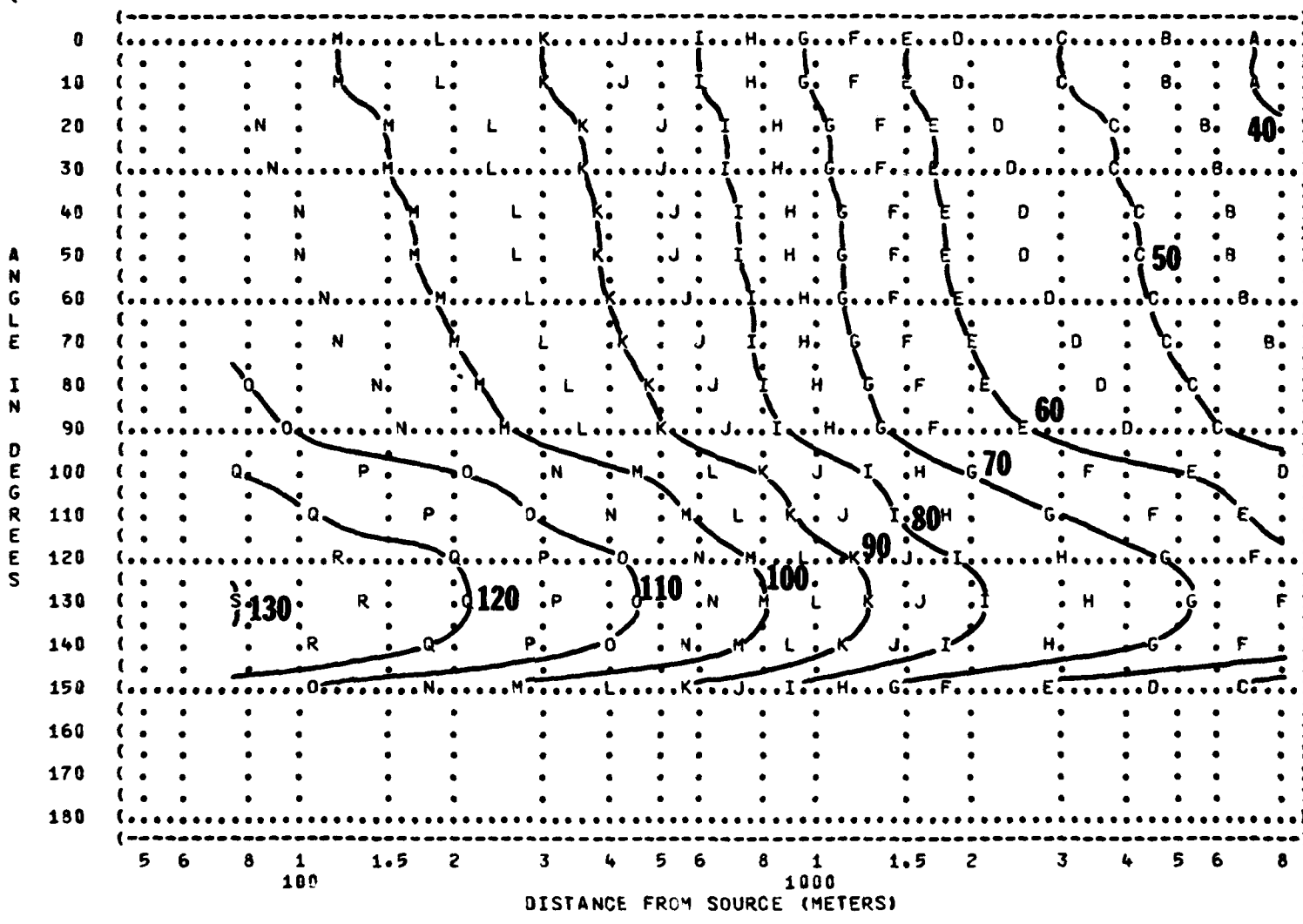
FIGURE 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 125 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
DEFLECTED FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-059
RUN 03
09 AUG 76
PAGE 20



POINT	DB
A	40
B	45
C	50
D	55
E	60
F	65
G	70
H	75
I	80
J	85
K	90
L	95
M	100
N	105
O	110
P	115
Q	120
R	125
S	130

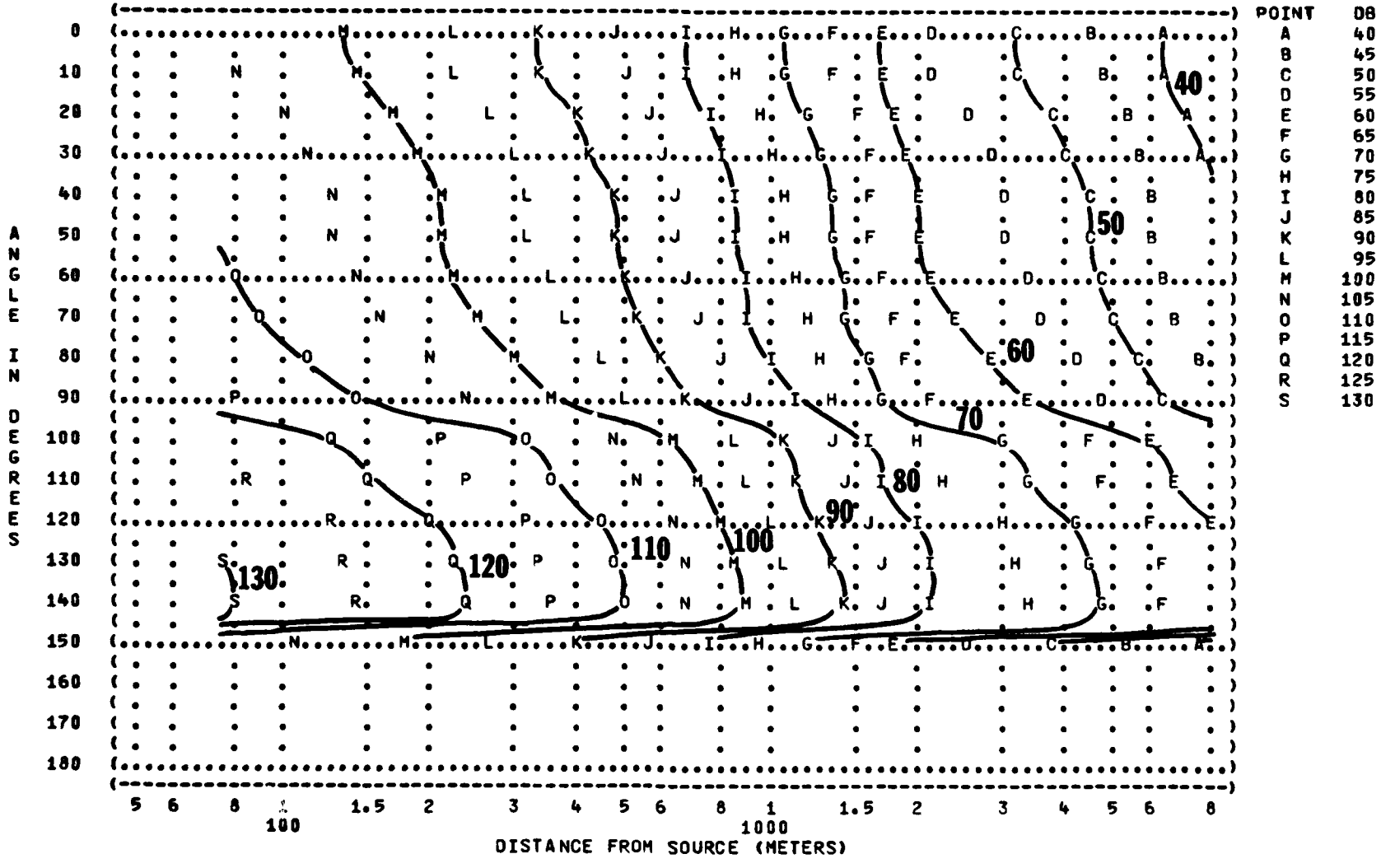
FIGURE: 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 250 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-059
RUN 03
09 AUG 76
PAGE 21

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
DEFLECTED FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DB
A	40
B	45
C	50
D	55
E	60
F	65
G	70
H	75
I	80
J	85
K	90
L	95
M	100
N	105
O	110
P	115
Q	120
R	125
S	130

FIGURE: 11

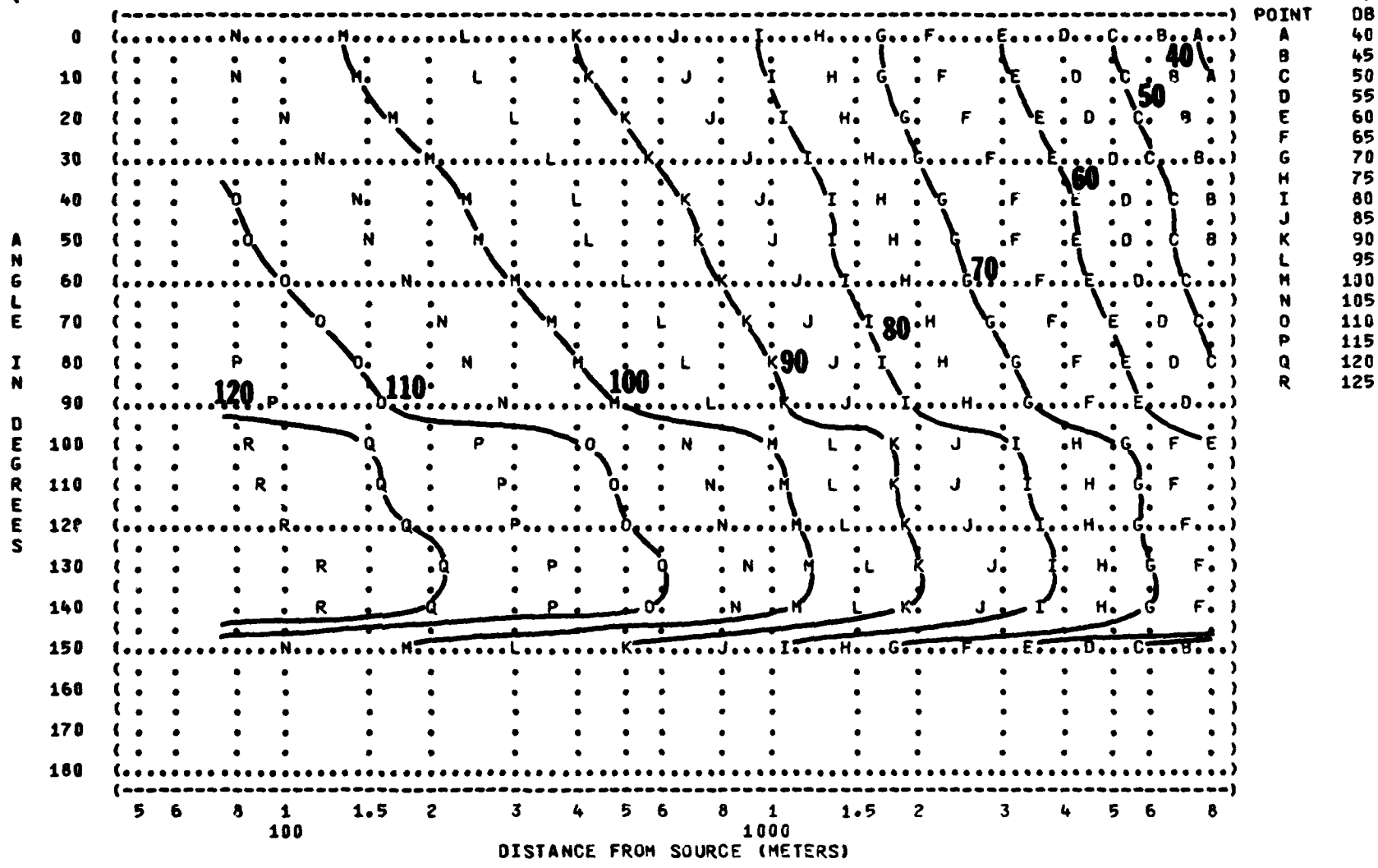
SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
500 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-059
RUN 03
09 AUG 76
PAGE 22

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
DEFLECTED FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DB
A	40
B	45
C	50
D	55
E	60
F	65
G	70
H	75
I	80
J	85
K	90
L	95
M	100
N	105
O	110
P	115
Q	120
R	125

FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 1000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
DEFLECTED FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-059
RUN 03
09 AUG 76
PAGE 23

POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110
Q	115
R	120

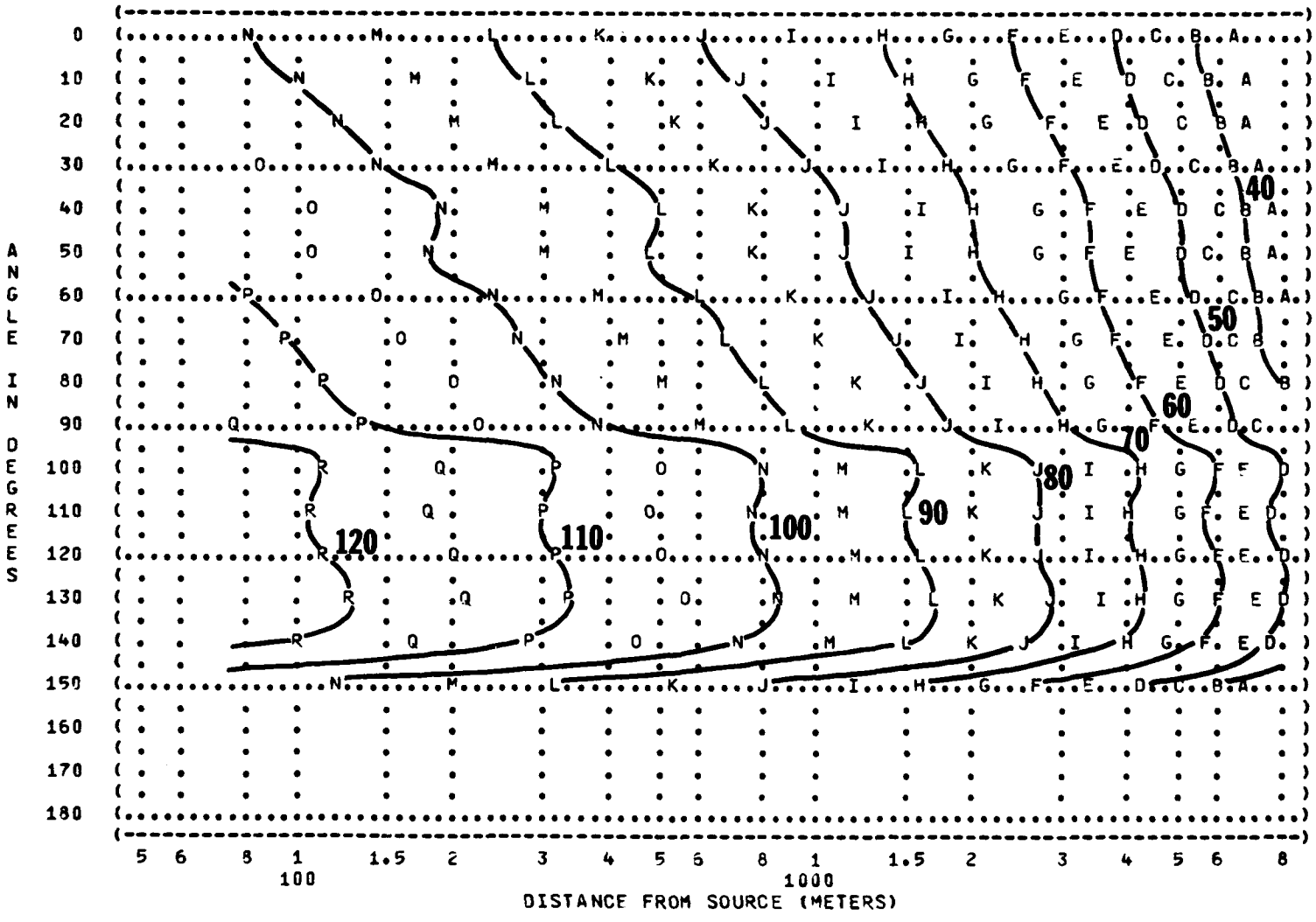


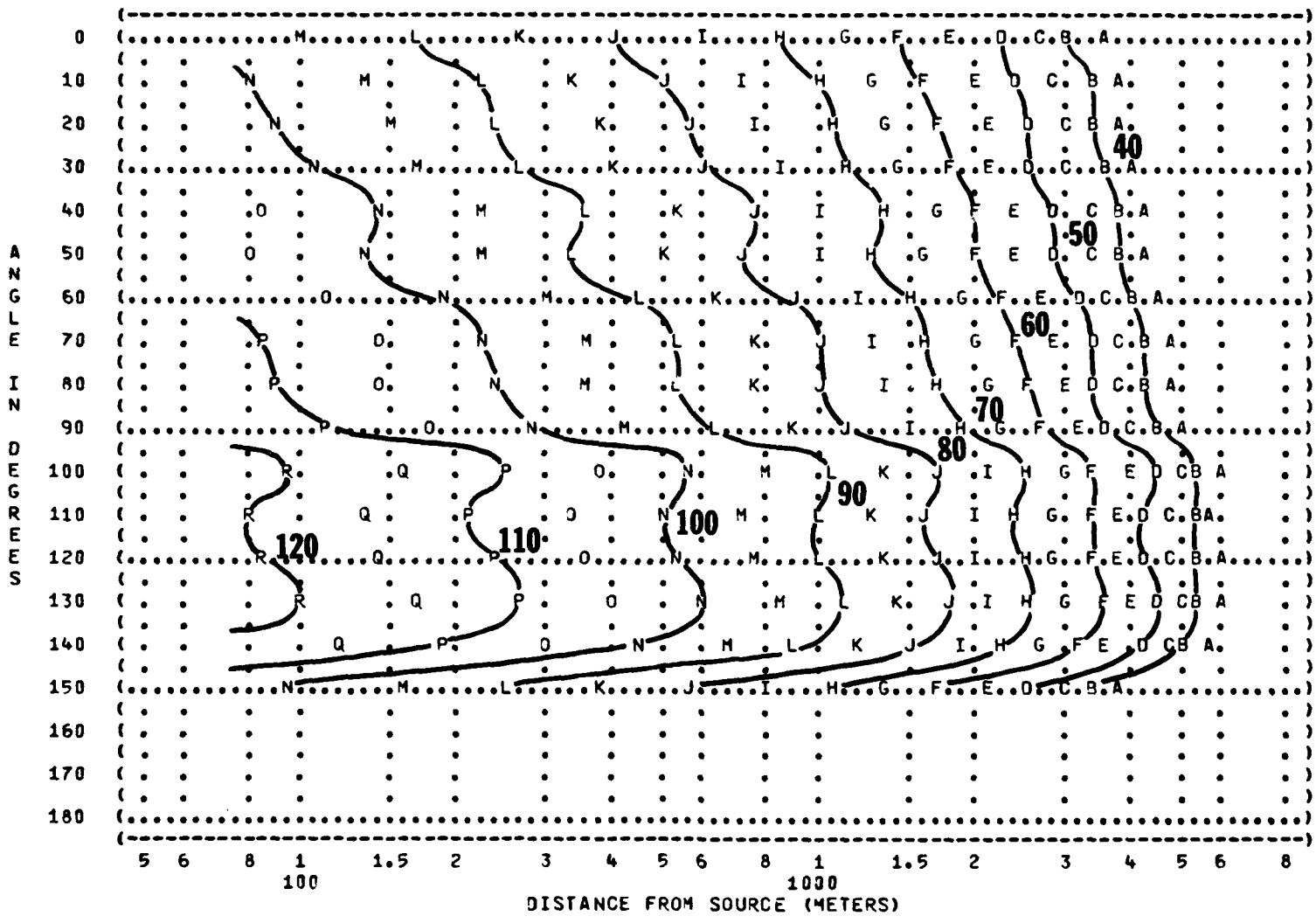
FIGURE: 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 2000 HZ OCTAVE BAND

IDENTIFICATION: OMEGA 1.4 TEST 75-002-059 RUN 03 09 AUG 76 PAGE 24

NOISE SOURCE/SUBJECT: F-4C AIRCRAFT J79-GE-15/A ENGINE FAR FIELD NOISE

OPERATION: AFTERBURNER POWER 100% RPM SINGLE ENGINE DEFLECTED FLOW

METEOROLOGY: TEMP = 15 C BAR PRESS = .760 M HG REL HUMID = 70 %



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110
Q	115
R	120

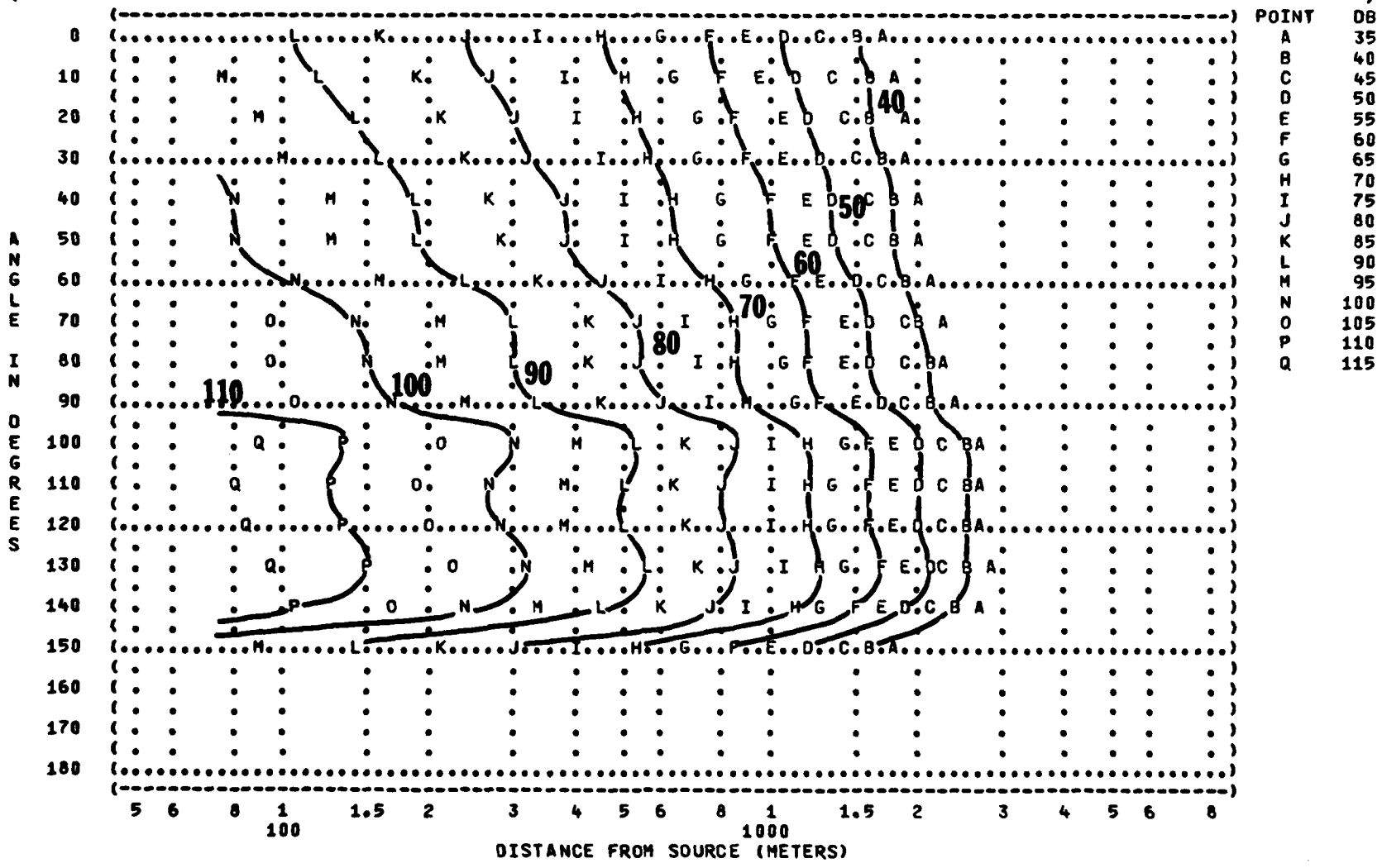
FIGURE 11 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 4000 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-059
RUN 03
09 AUG 76
PAGE 25

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
DEFLECTED FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110
Q	115

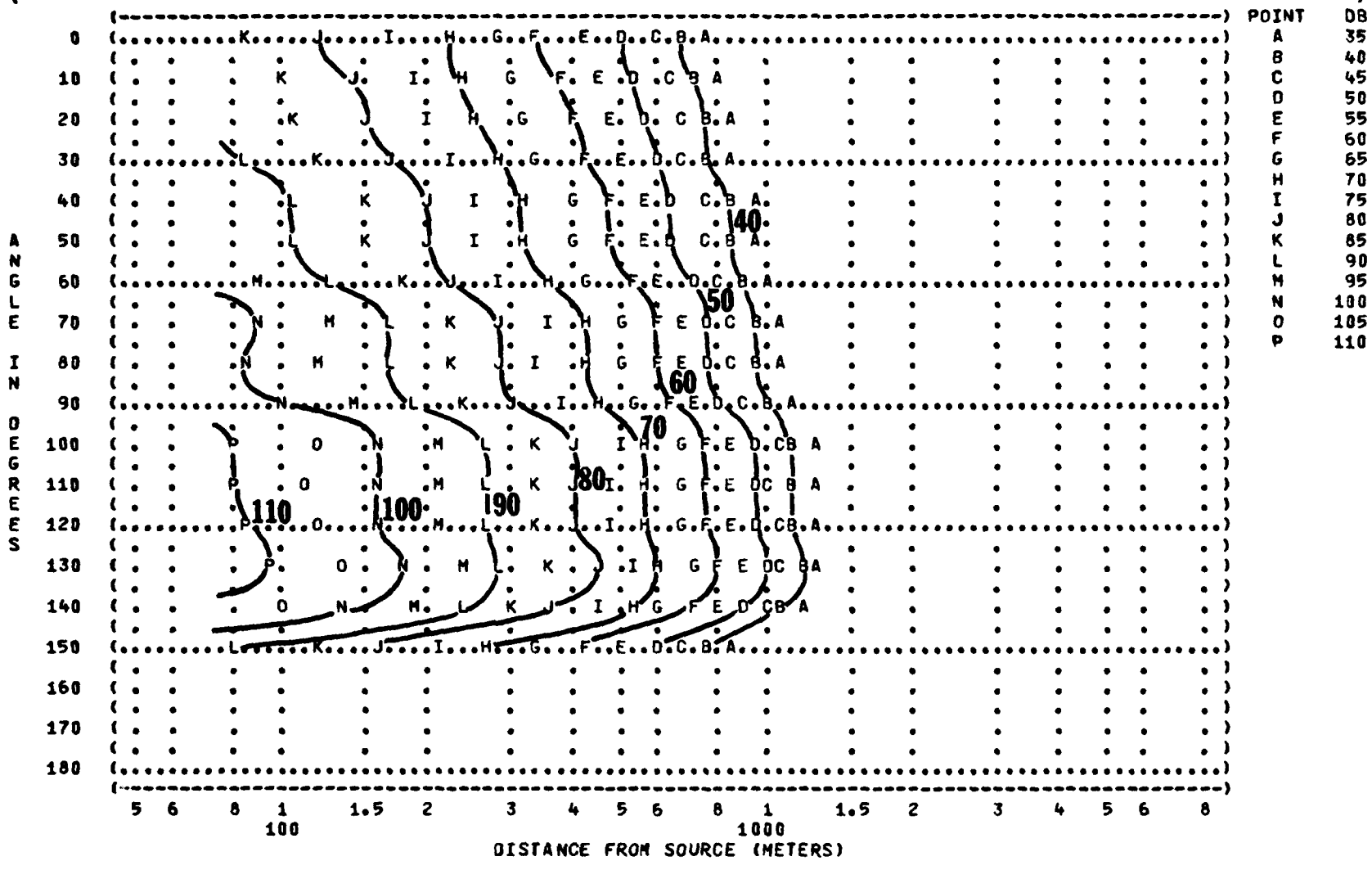
FIGURE 11: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 8000 HZ OCTAVE BAND

IDENTIFICATION: OMEGA 1.4 TEST 75-002-059 RUN 03 09 AUG 76 PAGE 26

NOISE SOURCE/SUBJECT:
F-4C AIRCRAFT
J79-GE-15/A ENGINE
FAR FIELD NOISE

OPERATION:
AFTERBURNER POWER
100% RPM
SINGLE ENGINE
DEFLECTED FLOW

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %



POINT	DB
A	35
B	40
C	45
D	50
E	55
F	60
G	65
H	70
I	75
J	80
K	85
L	90
M	95
N	100
O	105
P	110